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Section I
Table 1

ANNUAL SUPPLY/DISPOSITION SUMMARY OF TOTAL ENERGY IN THE U.S.**
(Quadrillion BTU)

SUPPLY/DISPOSITION	1985	1986	1987	1988	1989	1990	1995	2000
Production								
Crude Oil and Lease Condensate	19.0	18.4	17.6	17.3	16.9	16.1	13.8	12.8
NGPL's	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3
Natural Gas(1)	16.9	16.5	16.6	16.6	16.9	16.8	17.3	17.9
Coal	19.3	19.5	20.1	20.0	20.4	21.1	23.4	25.2
Nuclear	4.1	4.5	4.9	5.3	5.5	5.9	6.3	6.4
Hydropower/Other(2)	3.2	3.3	2.9	3.1	3.3	3.3	3.4	3.4
Total Production	64.8	64.2	64.3	64.5	65.2	65.4	66.5	68.0
Imports								
Crude Oil(3)	6.8	8.8	9.9	10.1	11.8	12.8	16.0	17.9
Petroleum Prod.	4.0	4.3	4.0	4.2	4.2	4.2	4.6	4.9
Natural Gas(4)	0.9	0.7	0.9	0.9	1.1	1.2	1.8	2.6
Other Imports(5)	0.5	0.4	0.5	0.4	0.5	0.6	0.6	0.8
Total Imports	12.1	14.3	15.3	15.7	17.6	18.8	23.1	26.2
Exports								
Coal	2.4	2.2	2.0	1.9	2.0	2.1	2.4	2.4
Petroleum	1.7	1.7	1.6	1.5	1.6	1.6	1.6	1.6
Total Exports	4.1	3.9	3.6	3.5	3.6	3.7	4.0	4.0
Adjustments(6)	1.2	-0.3	0.3	0.5	-0.5	-0.6	-0.6	-0.6
Consumption								
Petroleum Products(7)	30.9	32.2	32.6	33.0	33.4	33.7	35.1	36.3
Natural Gas	17.9	16.7	17.4	17.4	17.8	17.8	18.9	20.2
Coal	17.5	17.3	18.0	18.0	18.3	18.8	20.8	22.6
Nuclear	4.1	4.5	4.9	5.3	5.5	5.9	6.3	6.4
Hydroelectric/Other(8)	3.6	3.6	3.3	3.5	3.7	3.8	3.9	4.1
Total Consumption	74.0	74.2	76.2	77.2	78.8	79.9	85.0	89.6

** Base Case Forecast: Economy is assumed to maintain an average growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

(1) Dry natural gas.

(2) Includes hydropower, geothermal power, and wood waste.

(3) Includes imports of crude oil for the Strategic Petroleum Reserve.

(4) Represents net imports.

(5) Includes electricity, coal and coal coke imports.

(6) Balancing item that includes stock changes, gains, losses, and unaccounted for supply.

(7) Includes natural gas plant liquids and crude oil consumed as a fuel.

(8) Includes industrial generation of hydroelectric power, net electricity imports, and electricity produced from geothermal, wood, waste, wind, photovoltaic, solar thermal sources connected to electric utility distribution systems. Also includes net coal coke imports.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

U.S. CONSUMPTION OF ENERGY BY SOURCE AND END-USE SECTOR

(Quadrillion BTU)

SECTOR AND FUEL	1985	1986	1987	1988	1989	1990	1995	2000
Residential	8.88	8.82	9.09	9.28	9.34	9.42	9.63	9.67
Distillate and LPG(1)	1.53	1.52	1.51	1.59	1.56	1.54	1.44	1.34
Natural Gas	4.57	4.44	4.56	4.59	4.62	4.64	4.61	4.49
Other residential(2)	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.05
Electricity	2.70	2.79	2.95	3.03	3.10	3.17	3.52	3.78
Commercial	6.01	6.01	6.10	6.14	6.26	6.39	6.93	7.30
Petroleum	0.96	0.99	0.93	0.99	1.00	1.03	1.05	1.01
Natural Gas	2.51	2.39	2.40	2.38	2.42	2.46	2.60	2.68
Other Commerical(3)	0.18	0.18	0.19	0.18	0.18	0.18	0.18	0.18
Electricity	2.36	2.46	2.58	2.59	2.66	2.73	3.10	3.43
Industrial	20.40	20.01	20.58	20.88	21.49	21.91	23.23	24.16
Petroleum and LPG	4.60	4.73	4.79	4.84	4.97	5.09	5.49	5.80
Natural Gas	7.11	6.69	6.90	7.14	7.39	7.54	7.82	7.67
Coal	2.76	2.65	2.63	2.61	2.66	2.70	2.75	2.83
Other Industrial(4)	3.09	3.16	3.37	3.38	3.49	3.53	3.61	3.59
Hydropower	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Purchased Electricity	2.81	2.76	2.85	2.88	2.95	3.03	3.53	4.25
Transportation	20.09	20.76	21.25	21.49	21.59	21.68	21.94	22.30
Petroleum	19.30	19.98	20.45	20.68	20.67	20.84	21.05	21.34
Natural Gas	0.52	0.50	0.51	0.52	0.53	0.53	0.56	0.61
Other transportation(5)	0.27	0.27	0.29	0.29	0.30	0.31	0.33	0.36
Electric Utilities	26.52	26.67	27.56	27.90	28.79	29.49	33.41	37.61
Petroleum	1.10	1.45	1.23	1.18	1.30	1.26	2.06	2.77
Natural Gas	3.16	2.69	2.99	2.80	2.80	2.62	3.26	4.79
Coal	14.58	14.44	15.15	15.18	15.46	15.95	17.91	19.57
Nuclear	4.15	4.48	4.89	5.28	5.52	5.87	6.27	6.41
Hydropower/other(6)	3.54	3.61	3.30	3.46	3.72	3.78	3.91	4.07

** Base Case Forecast: Economy is assumed to maintain an everage growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

(1) Includes kerosene.

(2) Includes coal.

(3) Includes kerosene, and liquefied petroleum gas.

(4) Includes still gas, net coke imports, asphalt, special naphthas, lubricants, waxes, and petroleum coke.

(5) Includes liquefied petroleum gas, lubricants and waxes, and electricity.

(6) Includes renewable facilities such as hydropower, geothermal power, wood, waste, solar power and wind power. Also includes net electricity imports and minor petroleum products.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

SELECTED UNITED STATES ECONOMIC, DEMOGRAPHIC, AND ENERGY INDICATORS

Year	Gross National Product (Billion $ 1972)	Population (Millions)	Gross Energy Input(1) (Quadrillion Btu)	Gross Energy Per Dollar of 1972 GNP (Thousand Btu)	Gross Energy per capita (Million Btu)
1947	470.3	144.1	33.0	70.2	229.0
1948	489.8	146.6	33.9	69.2	231.2
1949	492.2	149.2	31.5	64.0	211.1
1950	534.8	152.3	34.0	63.6	223.2
1951	579.4	154.9	36.8	63.5	237.6
1952	600.8	157.6	36.5	60.8	231.7
1953	623.6	160.2	37.6	60.3	234.7
1954	616.1	163.0	36.3	58.9	222.7
1955	667.5	165.9	39.7	60.4	239.3
1956	671.6	168.9	41.7	62.1	246.9
1957	683.8	172.0	41.7	61.0	242.2
1958	680.9	174.9	41.7	61.2	238.4
1959	721.7	177.8	43.1	59.7	242.4
1960	737.1	180.7	44.6	60.5	246.8
1961	756.6	183.8	45.3	59.9	246.5
1962	800.3	186.5	47.4	59.2	254.1
1963	832.5	189.2	49.3	59.2	260.5
1964	876.4	191.8	51.2	58.4	266.9
1965	929.3	194.3	53.3	57.4	274.3
1966	984.8	196.6	56.4	57.3	286.9
1967	1,011.4	198.7	58.3	57.6	293.4
1968	1,058,1	200.7	61.7	58.3	307.4
1969	1,087.6	202.7	65.0	59.8	320.7
1970	1,085.6	205.1	67.1	61.8	327.2
1971	1,122.4	207.7	68.3	60.9	328.8
1972	1,185.9	209.9	71.6	60.4	341.1
1973	1,254.0	212.0	74.6	59.5	351.9
1974	1,246.0	213.9	72.7	58.3	339.9
1975	1,232.0	216.0	70.5	57.2	326.4
1976	1,298.0	218.4	74.3	57.2	340.2
1977	1,370.0	220.2	76.2	55.6	346.1
1978	1,439.0	222.6	78.0	54.2	350.4
1979	1,479.0	225.6	78.8	53.3	349.3
1980	1,475.0	227.7	75.9	51.5	333.3
1981	1,514.0	229.3	73.9	48.8	322.3
1982	1,485.0	231.5	70.8	47.7	305.8
1983	1,535.0	234.0	70.5	45.9	301.3
1984	1,639.0	236.2	74.0	45.2	313.3

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(1) Gross energy is the total of inputs into the economy of the primary fuels (petroleum, natural gas, and coal), including imports of their derivatives plus the generation of hydro and nuclear power converted to equivalent energy inputs.

Source: U.S. Bureau of Mines, Press Release, March 14, 1977
U.S. Department of Commerce: U.S. Bureau of Census, Current Population Reports
U.S. Energy Information Administration, Monthly Energy Review

SELECTED UNITED STATES ECONOMIC, DEMOGRAPHIC, AND ENERGY INDICATORS

Year	Gross National Product (Billion 1982 $)	Population (Millions)	Gross Energy Input(1) (Quadrillion Btu)	Gross Energy Per Dollar of 1982 GNP (Thousand Btu)	Gross Energy Per Capita (Million Btu)
1985	3,608.0	238.7	73.9	20.5	309.6
1986	3,713.0	241.1	74.3	20.0	308.2
1987	3,821.0	246.3	76.0	19.9	308.6

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(1) Gross energy is the total of inputs into the economy of the primary fuels (petroleum, natural gas, and coal), including imports of their derivatives plus the generation of hydro and nuclear power converted to equivalent energy inputs.

Source: U.S. Department of Commerce, U.S. Bureau of the Census--Current Population Reports
U.S. Department of Energy, Energy Information Administration--Monthly Energy Review

Section I
Table 4

U.S. PETROLEUM SUPPLY/DISPOSITION BALANCE**
(Millions of Barrels Per Day)

SUPPLY/DISPOSITION	1985	1986	1987	1988	1989	1990	1995	2000
World Oil Price(1)	28.52	14.40	18.11	16.80	17.61	17.81	22.40	30.76
Production	11.19	10.90	10.60	10.48	10.26	9.88	8.81	8.35
Crude and Condensate	8.97	8.68	8.31	8.18	8.00	7.63	6.54	6.03
Alaska	1.83	1.87	1.96	2.07	2.05	1.87	1.36	0.89
Lower 48	7.15	6.81	6.34	6.11	5.95	5.76	5.18	5.14
Natural Gas Plant Liquids	1.61	1.55	1.60	1.60	1.58	1.57	1.62	1.67
Other domestic	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Processing gain(2)	0.56	0.62	0.63	0.64	0.63	0.62	0.60	0.59
Imports (incl. SPR)	5.07	6.22	6.55	6.77	7.56	8.03	9.73	10.76
Crude	3.20	4.18	4.66	4.76	5.57	6.03	7.56	8.45
Refined products	1.87	2.05	1.89	2.01	1.99	2.01	2.18	2.30
Exports	0.78	0.78	0.75	0.72	0.75	0.75	0.75	0.75
Crude	0.20	0.15	0.14	0.17	0.19	0.19	0.19	0.19
Refined Products	0.58	0.63	0.61	0.55	0.56	0.56	0.56	0.56
Net Imports(incl SPR)	4.29	5.44	5.81	6.04	6.81	7.28	8.98	10.01
Primary Stock Changes								
Net withdrawals	0.22	-0.15	-0.09	0.07	-0.07	-0.02	0.01	0.03
SPR additions(-)	-0.12	-0.05	-0.06	-0.04	-0.05	-0.08	-0.08	0.00
Total Primary Supply	15.58	16.14	16.31	16.55	16.95	17.07	17.73	18.31
Refined Petroleum Products	15.73	16.28	16.52	16.66	16.96	17.06	17.72	18.30
Motor Gasoline	6.83	7.03	7.16	7.24	7.18	7.13	6.91	6.82
Jet fuel(3)	1.22	1.31	1.36	1.41	1.45	1.47	1.51	1.55
Distillate Fuel Oil(4)	2.98	3.01	3.08	3.14	3.18	3.25	3.51	3.71
Residual Fuel Oil	1.20	1.42	1.25	1.21	1.31	1.32	1.70	1.95
Other Products(5)	3.49	3.51	3.67	3.65	3.84	3.90	4.09	4.26

** Base Case Forecast: Economy is assumed to maintain an average growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

(1) The cost of imported crude oil to U.S. refiners.

(2) Represents volumetric gain in refinery distillation and cracking processes.

(3) Includes naphtha and kerosene type.

(4) Includes kerosene.

(5) Includes aviation gasoline, liquefied petroleum gas, petrochemical feedstocks, miscellaneous petroleum products, lubricants, waxes, plant condensate, natural gasoline, asphalt, road oil, still gas, special naphthas, petroleum coke, and unfinished oils.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

Section I
Table 5

U.S. PRICE OF ENERGY BY SOURCE AND END-USE SECTOR**
(1987 Dollars per Million BTU)

SECTOR AND FUEL	1985	1986	1987	1988	1989	1990	1995	2000
Residential	12.07	11.30	11.41	11.26	11.43	11.48	12.29	13.71
Primary Energy	6.80	6.13	6.08	6.06	6.22	6.29	7.10	8.36
Petroleum Products	8.53	7.16	8.18	7.83	8.30	8.43	9.69	11.68
Natural Gas	8.18	5.82	5.44	5.50	5.56	5.63	6.35	7.43
Steam Coal	3.22	2.90	2.72	2.75	2.80	2.86	3.13	3.41
Electricity	24.13	22.36	22.49	21.99	21.95	21.71	21.28	22.04
Commercial	12.56	11.59	11.76	11.50	11.62	11.58	12.05	13.32
Primary Energy	5.75	4.75	4.66	4.63	4.77	4.81	5.45	6.53
Petroleum Products	6.45	4.29	5.10	4.86	5.17	5.25	6.36	8.24
Natural Gas	5.63	5.10	4.61	4.67	4.73	4.74	5.21	6.02
Steam Coal	1.83	1.67	1.56	1.58	1.61	1.64	1.80	1.96
Electricity	23.13	21.52	21.45	20.92	20.89	20.63	20.21	20.97
Industrial	6.41	4.74	4.89	4.71	4.80	4.83	5.51	6.84
Primary Energy	4.88	3.20	3.35	3.23	3.36	3.41	4.12	5.32
Petroleum Products	6.62	3.68	4.53	4.21	4.43	4.48	5.33	6.94
Natural Gas	4.08	3.14	2.57	2.63	2.69	2.75	3.46	4.52
Metallurgical Coal	2.14	1.95	1.81	1.83	1.86	1.87	2.02	2.15
Steam Coal	1.79	1.66	1.58	1.62	1.62	1.65	1.80	1.95
Electricity	15.98	14.79	14.44	13.94	13.90	13.67	13.26	13.97
Transportation	8.66	6.27	6.95	6.76	6.94	7.02	8.10	9.89
Primary Energy	8.65	6.26	6.95	6.76	6.93	7.01	8.09	9.88
Petroleum Products	8.65	6.26	6.95	6.76	6.93	7.01	8.09	9.88
Electricity	20.75	20.04	19.32	18.28	18.54	18.03	17.51	18.64
Electric Utilities								
Fossil Fuel Average	2.22	1.80	1.71	1.70	1.75	1.77	2.11	2.67
Petroleum Products	4.59	2.55	3.10	2.80	3.01	3.02	3.72	5.00
Natural Gas	3.62	2.42	2.22	2.29	2.36	2.45	3.30	4.54
Steam Coal	1.74	1.63	1.52	1.51	1.54	1.56	1.71	1.89
Average Price to All Users								
Petroleum Products	7.92	5.44	6.20	5.97	6.15	6.22	7.13	8.77
Natural Gas	4.80	4.04	3.57	3.64	3.69	5.86	4.41	5.39
Coal	1.78	1.66	1.53	1.54	1.57	1.59	1.74	1.91
Electricity	20.91	19.38	19.43	18.94	18.89	18.65	18.16	18.73

** Base Case Forecast: Economy is assumed to maintain an average growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

Section I
Table 6

UNITED STATES TOTAL GROSS CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES(1)
(Trillion Btu)

Year	Coal(2)	Petroleum(3)	Natural Gas Dry	Hydro-power(4)	Nuclear Power(4)	Total Consumption
1947	15,824	11,367	4,518	1,326	-	33,035
1948	14,897	12,557	5,033	1,393	-	33,880
1949	12,631	12,119	5,289	1,449	-	31,488
1950	12,913	13,489	6,150	1,440	-	33,992
1951	13,225	14,848	7,248	1,454	-	36,775
1952	11,868	15,334	7,760	1,496	-	36,458
1953	11,893	16,098	8,156	1,439	-	37,586
1954	10,195	16,132	8,548	1,388	-	36,263
1955	11,540	17,524	9,232	1,407	-	39,703
1956	11,752	18,627	9,834	1,487	-	41,700
1957	11,168	18,570	10,416	1,551	1	41,706
1958	9,849	19,214	10,995	1,636	2	41,696
1959	9,810	19,747	11,990	1,591	2	43,140
1960	10,140	20,067	12,699	1,657	6	44,569
1961	9,906	20,487	13,228	1,680	18	45,319
1962	10,189	21,267	14,121	1,821	24	47,422
1963	10,714	21,950	14,843	1,767	34	49,308
1964	11,264	22,386	15,648	1,907	35	51,240
1965	11,908	23,242	16,097	2,058	38	53,343
1966	12,495	24,395	17,392	2,073	57	56,412
1967	12,256	25,335	18,250	2,344	80	58,265
1968	12,659	27,052	19,580	2,342	130	61,763
1969	12,733	28,421	21,020	2,659	146	64,979

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives) and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, processing, and transportation of energy power.

(2) Includes anthracite, bituminous, lignite coal, and imported coke.

(3) Petroleum products including still gas, liquefied refinery gas, and natural gas liquids.

(4) Output of hydropower (adjusted for net imports or net exports) and nuclear power converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree and J.A. West: "United States Energy Through The Year 2000," December 1972

UNITED STATES TOTAL GROSS CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES(1)

(Trillion Btu)

Year	Coal(2)	Petroleum(3)	Natural Gas Dry	Hydro-power(4)	Nuclear Power(4)	Total Consumption
1970	12,698	29,537	22,029	2,650	229	67,143
1971	12,043	30,570	22,469	2,862	404	68,348
1972	12,461	32,966	22,699	2,929	577	71,643
1973	12,971	34,840	22,512	3,010	910	74,282
1974	12,663	33,455	21,732	3,309	1,272	72,543
1975	12,663	32,731	19,948	3,219	1,900	70,545
1976	13,584	35,175	20,345	3,065	2,111	74,362
1977	13,922	37,122	19,931	2,515	2,702	76,289
1978	13,765	37,965	20,000	3,142	3,024	78,089
1979	15,039	37,123	20,666	3,141	2,776	78,897
1980	15,423	34,202	20,394	3,118	2,739	75,955
1981	15,907	31,931	19,928	3,105	3,008	73,990
1982	15,322	30,231	18,505	3,561	3,131	70,837
1983	15,894	30,054	17,357	3,871	3,203	70,497
1984	17,070	31,051	18,507	3,717	3,553	74,060
1985	17,478	30,922	17,834	3,363	4,147	73,944
1986	17,262	32,196	16,708	3,405	4,475	74,260
1987	18,020	32,627	17,180	3,041	4,920	76,042

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives) and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, processing, and transportation of energy power.

(2) Includes anthracite, bituminous, lignite coal, and imported coke.

(3) Petroleum products including still gas, liquefied refinery gas, and natural gas liquids.

(4) Output of hydropower (adjusted for net imports or net exports) and nuclear power converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission.

(5) Figures do not total due to omission of geothermal power and electricity produced from wood and waste.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines: Press Release, February 1977
U.S. Department of Energy: 1973-1987: Energy Information Administration, Monthly Energy Review

Section I
Table 7

UNITED STATES TOTAL PRODUCTION OF ENERGY RESOURCES BY MAJOR SOURCE
(Trillion Btu)

Year	Coal(1)	Petroleum	Natural Gas	Hydropower	Nuclear Power	Total Domestic Gross Energy Inputs
1947	17,975	10,771	5,012	1,296	--	35,054
1948	17,158	11,717	5,615	1,369	--	35,859
1949	12,557	10,683	5,911	1,425	--	30,576
1950	14,647	11,449	6,841	1,415	--	34,352
1951	15,066	13,037	8,106	1,424	--	37,633
1952	13,262	13,282	8,705	1,466	--	36,715
1953	12,767	13,671	9,116	1,413	--	36,967
1954	11,001	13,427	9,488	1,360	--	35,276
1955	12,745	14,445	10,532	1,360	--	39,082
1956	13,747	15,344	11,252	1,435	--	41,778
1957	13,444	15,346	11,885	1,422	1	42,098
1958	11,201	14,154	12,244	1,592	2	39,193
1959	11,105	14,662(3)	13,361(3)	1,551(3)	2	40,681
1960	11,140	14,664(4)	14,135(4)	1,608(4)	6	41,553
1961	10,751	15,185	14,691	1,656	18	42,301
1962	11,211	15,495	15,365	1,816	24	43,911
1963	12,176	15,741	16,271	1,768	34	45,990
1964	12,854	15,691	17,138	1,886	35	47,604
1965	13,395	15,930	17,652	2,059	38	49,074
1966	13,836	16,925	18,984	2,062	57	51,864
1967	14,215	18,100	20,087	2,347	80	54,829
1968	13,955	18,593	21,548	2,349	130	56,575
1969	14,223	18,886	22,838	2,648	146	58,741
1970	15,067	20,401	24,154	2,630	229	62,481
1971	13,607	20,033	24,805	2,825	404	61,674
1972	14,500	20,041	24,792	2,866	576	62,775
1973	13,993	19,493	24,756	2,861	910	62,059
1974	14,074	18,575	23,681	3,177	1,272	60,836

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(1) Includes anthracite, bituminous and lignite coals.
(3) Includes Alaska.
(4) Denotes first year for which figures include Alaska and Hawaii.

Source: U.S. Department of Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through The Year 2000," December 1972
1970-1972: U.S. Bureau of Mines, Press Release
1973-1974: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

Section I
Table 7a

UNITED STATES TOTAL PRODUCTION OF ENERGY RESOURCES BY MAJOR SOURCE
(Trillion Btu)

Year	Coal(1)	Petroleum	Natural Gas(2)	Hydropower	Nuclear Power	Total Domestic Gross Energy Inputs(3)
1975	14,990	17,729	22,014	3,155	1,900	59,860
1976	15,654	17,262	21,807	2,976	2,111	59,891
1977	15,755	17,454	21,892	2,333	2,702	60,218
1978	14,910	18,434	21,730	2,937	3,024	61,103
1979	17,539	18,104	22,362	2,931	2,776	63,801
1980	18,597	18,249	22,162	2,900	2,739	64,761
1981	18,376	18,146	22,006	2,758	3,008	64,421
1982	18,639	18,309	20,446	3,256	3,131	63,889
1983	17,246	18,392	18,714	3,502	3,203	61,190
1984	19,719	18,848	20,205	3,312	3,553	65,810
1985	19,325	18,992	19,147	2,939	4,147	64,764
1986	19,510	18,376	18,620	3,034	4,475	64,246
1987	20,121	17,593	19,050	2,609	4,920	64,539

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(1) Includes anthracite, bituminous and lignite coals.
(2) Includes natural gas plant liquids _
(3) Figures do not total due to omission of geothermal power and electricity produced from wood and waste.

Source: U.S. Department of Energy, Energy Information Administration: Monthly Energy Review

Section I
Table 8

TOTAL U.S. GROSS CONSUMPTION BY CONSUMING SECTOR(1)
(Trillion Btu)

Year	Household and Commercial	Industrial	Transportation	Electricity Generation	Miscellaneous and Un-Accounted for	Total Consumption(2)
1947	6,775	12,795	8,791	4,264	410	33,035
1948	7,039	12,322	8,781	4,725	1,014	33,880
1949	6,884	11,369	8,075	4,616	544	31,488
1950	7,593	12,325	8,616	4,981	477	33,992
1951	7,857	13,698	9,206	5,281	733	36,775
1952	7,979	13,098	9,168	5,518	695	36,458
1953	7,757	13,752	9,205	5,891	981	37,586
1954	7,968	12,515	9,113	5,940	727	36,263
1955	8,595	13,991	9,826	6,595	696	39,703
1956	8,963	14,588	10,132	7,082	935	41,700
1957	8,685	14,503	10,229	7,330	959	41,706
1958	9,467	13,507	10,275	7,317	1,130	41,696
1959	9,711	14,040	10,387	7,873	1,129	43,140
1960	10,174	14,642	10,818	8,263	672	44,569
1961	10,373	14,631	10,986	8,537	792	45,319
1962	10,948	15,249	11,415	9,093	717	47,422
1963	11,016	15,908	11,962	9,683	739	49,308
1964	11,143	16,698	12,261	10,375	763	51,240
1965	11,830	17,176	12,714	11,075	548	53,343
1966	12,388	18,028	13,345	12,054	597	56,412
1967	13,015	18,230	14,015	12,728	278	58,265
1968	13,109	19,363	15,156	13,892	243	61,763
1969	13,606	20,107	15,784	15,254	228	64,979
1970	13,988	20,225	16,473	16,242	215	67,143
1971	14,549	19,299	17,076	17,222	205	68,348
1972	14,917	19,835	18,081	18,543	233	71,609
1973	12,271	23,593	18,567	19,853	NA	74,282
1974	11,771	22,602	18,082	20,022	NA	72,543

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives), and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, and transportation of energy power.

(2) Data may not add to totals because of independent rounding.

SOURCE: U.S. Department of the Interior: 1947-1969: W.G. Dupree and J.A. West, "United States Energy Through the Year 2000," December 1972.
1970: U.S. Bureau of Mines, Minerals Yearbook 1973
1971-1972: U.S. Bureau of Mines, Press Release, February 1977
1973-1974: Department of Energy, Energy Information Administration, Monthly Energy Review

TOTAL U.S. GROSS CONSUMPTION BY CONSUMING SECTOR(1)
(Trillion Btu)

Year	Household and Commercial	Industrial	Transportation	Electrical Generation	Miscellaneous and Un-Accounted for	Total Consumption(2)
1975	11,596	20,381	18,205	20,350	NA	70,545
1976	12,250	21,472	19,058	21,573	NA	74,362
1977	11,873	21,908	19,773	22,713	NA	76,289
1978	11,907	21,775	20,558	23,724	NA	78,089
1979	11,525	22,752	20,429	24,128	NA	78,897
1980	10,720	21,106	19,658	24,505	NA	75,955
1981	10,044	19,742	19.459	24,760	NA	73,990
1982	10,063	17,498	19,029	24,260	NA	70,837
1983	9,715	16,764	19,097	24,929	NA	70,497
1984	10,086	18,208	19,839	25,937	NA	74,060
1985	9,827	17,575	20,077	26,482	NA	73,944
1986	9,576	17,303	20,734	26,665	NA	74,260
1987	9,622	17,734	21,120	27,559	NA	76,042

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imiported. Gross energy comprises inputs of primary fuels (or their derivatives), and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, and transportation of energy power.

(2) Data may not add to totals because of independent rounding and consumption of geothermal power and electricity produced from wood, waste and wind energy.

SOURCE: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

Section I
Table 9

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE INDUSTRIAL SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	273,403	7,298	418.3	2,490	2,905,571	3,007	135	459	13,254
1948	244,214	6,516	427.0	2,530	3,164,928	3,276	147	500	12,822
1949	208,919	5,571	415.6	2,466	3,219,197	3,332	142	485	11,854
1950	223,507	5,957	442.4	2,641	3,601,757	3,727	164	559	12,884
1951	238,776	6,403	516.1	3,044	4,107,117	4,251	192	656	14,354
1952	211,146	5,673	515.0	3,034	4,242,986	4,391	200	682	13,780
1953	226,865	6,105	524.7	3,093	4,389,128	4,554	224	765	14,517
1954	179,148	4,860	529.8	3,118	4,383,197	4,537	235	802	13,317
1955	214,946	5,726	566.7	3,330	4,768,562	4,935	295	1,008	14,999
1956	217,810	5,805	626.6	3,688	4,922,139	5,095	326	1,113	15,701
1957	213,404	5,695	595.8	3,478	5,150,413	5,330	332	1,133	15,636
1958	175,600	4,675	570.3	3,292	5,352,294	5,540	323	1,102	14,609
1959	169,924	4,530	625.1	3,589	5,720,756	5,921	356	1,215	15,255
1960	175,225	4,673	643.9	3,682	6,074,114	6,287	383	1,306	15,948
1961	168,090	4,478	642.6	3,682	6,221,668	6,471	383	1,306	15,937
1962	169,995	4,527	678.8	3,880	6,579,008	6,842	411	1,402	16,651
1963	178,201	4,754	702.0	3,994	6,917,738	7,160	429	1,464	17,372
1964	189,561	5,063	744.6	4,184	7,198,706	7,451	453	1,544	18,242
1965	200,688	5,366	740.4	4,139	7,433,200	7,671	479	1,634	18,810
1966	204,945	5,472	781.0	4,353	7,948,486	8,203	524	1,788	19,816
1967	194,595	5,199	798.4	4,432	8,332,614	8,599	547	1,868	20,098
1968	191,602	5,124	897.2	4,965	8,987,095	9,274	599	2,044	21,407
1969	188,586	5,051	943.6	5,171	9,587,670	9,885	632	2,155	22,262

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000," December 1972

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE INDUSTRIAL SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	186,637	5,002	940.4	5,061	9,856,844	10,161	648	2,210	22,434
1971	158,866	4,303	947.9	5,088	9,577,212	9,874	682	2,327	21,592
1972	160,624	4,275	1,058.2	5,643	9,622,659	9,882	741	2,528	22,328
1973	163,076	4,057	1,637.6	9,113	10,184,314	10,388	686	2,341	25,926
1974	156,075	3,868	1,570.9	8,698	9,768,555	10,003	685	2,337	24,998(4)
1975	148,151	3,666	1,474.8	8,151	8,364,706	8,532	688	2,346	22,742(4)
1976	147,219	3,660	1,629.3	9,018	8,597,645	8,761	754	2,573	24,045
1977	139,792	3,453	1,762.6	9,786	8,474,975	8,636	786	2,682	24,606(4)
1978	135,287	3,314	1,783.3	9,890	8,404,528	8,539	809	2,761	24,659(4)
1979	145,903	3,593	1,952.7	10,576	8,397,839	8,549	842	2,873	25,688(4)
1980	127,573	3,155	1,771.6	9,524	8,197,267	8,394	815	2,781	23,852
1981	129,015	3,157	1,562.1	8,295	8,055,610	8,257	826	2,817	22,544
1982	105,511	2,552	1,481.8	7,797	6,935,673	7,116	745	2,542	20,018
1983	103,483	2,490	1,407.2	7,420	6,615,907	6,821	776	2,648	19,396
1984	118,215	2,842	1,500.2	7,885	7,232,039	7,449	839	2,862	21,058
1985	116,756	2,760	1,462.9	7,702	6,867,119	7,080	835	2,850	20,410
1986	111,826	2,643	1,486.9	7,934	6,504,373	6,693	808	2,758	20,043
1987	112,175	2,671	1,539.6	8,157	6,679,300	6,873	847	2,891	20,633

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.
(4) Total includes small amounts of imported coke.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1987: Energy Information Administration, Monthly Energy Review

Section I
Table 10

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE HOUSEHOLD AND COMMERCIAL SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	128,657	3,399	385.3	2,251	1,087,000	1,125	115	391	7,148
1948	122,994	3,238	436.0	2,539	1,219,402	1,262	130	442	7,481
1949	114,639	3,025	425.5	2,472	1,340,362	1,387	143	488	7,372
1950	110,422	2,913	526.2	3,038	1,586,207	1,642	160	546	8,139
1951	100,057	2,648	552.0	3,202	1,939,034	2,007	180	615	8,471
1952	91,212	2,416	577.1	3,350	2,137,635	2,213	195	666	8,645
1953	77,976	2,072	585.4	3,391	2,216,153	2,294	215	733	8,490
1954	65,425	1,752	630.4	3,650	2,479,205	2,566	234	797	8,765
1955	66,039	1,745	691.7	4,001	2,753,171	2,849	250	854	9,449
1956	61,685	1,629	721.8	4,183	3,044,435	3,151	274	935	9,898
1957	46,382	1,225	703.4	4,069	3,276,185	3,391	299	1,019	9,704
1958	45,005	1,187	788.3	4,568	3,586,025	3,712	321	1,095	10,562
1959	36,700	969	817.5	4,718	3,887,708	4,024	353	1,203	10,914
1960	37,180	983	853.3	4,923	4,123,389	4,268	370	1,262	11,436
1961	32,805	868	871.9	5,028	4,325,427	4,477	406	1,385	11,758
1962	32,955	872	907.7	5,227	4,685,231	4,849	437	1,490	12,438
1963	27,603	731	915.0	5,258	4,856,804	5,027	482	1,645	12,661
1964	22,949	609	903.7	5,191	5,162,009	5,343	525	1,792	12,935
1965	25,676	678	978.0	5,635	5,346,450	5,517	571	1,948	13,778
1966	25,587	677	1,000.1	5,766	5,760,999	5,945	616	2,101	14,489
1967	22,134	585	1,078.9	6,206	6,029,855	6,223	661	2,257	15,271
1968	19,983	529	1,069.5	6,129	6,250,997	6,451	723	2,467	15,576
1969	16,875	447	1,099.6	6,269	6,682,804	6,890	807	2,752	16,358

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West. "United States Energy Through The Year 2000," December 1972

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE HOUSEHOLD AND COMMERCIAL SECTOR

Year	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	16,114	427	1,128.4	6,453	6,984,007	7,108	879	3,000	16,988
1971	15,201	406	1,124.9	6,430	7,480,667	7,713	940	3,209	17,758
1972	11,708	308	1,168.4	6,666	7,733,964	7,943	1,019	3,478	18,395
1973	10,210	254	815.1	4,391	7,476,470	7,626	1,024	3,495	15,766
1974	10,370	257	743.2	3,996	7,341,797	7,518	1,018	3,475	15,246
1975	8,446	209	710.2	3,805	7,432,352	7,581	1,056	3,604	15,200
1976	8,165	203	776.7	4,181	7,719,333	7,866	1,098	3,747	15,997
1977	8,299	205	780.5	4,206	7,321,884	7,461	1,159	3,955	15,828
1978	8,736	214	756.2	4,070	7,503,937	7,624	1,206	4,116	16,023
1979	7,594	187	630.2	3,448	7,751,473	7,891	1,226	4,184	15,709
1980	5,863	145	555.1	3,035	7,347,953	7,540	1,276	4,355	15,075
1981	6,825	167	487.0	2,634	7,065,366	7,243	1,318	4,497	14,541
1982	7,731	187	454.2	2,449	7,244,639	7,427	1,338	4,566	14,629
1983	7,979	192	472.6	2,498	6,812,803	7,024	1,372	4,680	14,395
1984	8,693	209	491.4	2,585	7,079,612	7,292	1,443	4,922	15,008
1985	7,572	176	494.5	2,573	6,866,149	7,079	1,487	5,072	14,899
1986	7,447	176	491.8	2,576	6,632,653	6,825	1,539	5,251	14,827
1987	6,888	164	500.4	2,606	6,659,864	6,853	1,605	5,475	15,097

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponsing to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1970--U.S. Bureau of Mines, Minerals Yearbook 1972
1971-1972--U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1987--Energy Information Administration, Monthly Energy Review

Section I
Table 11

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE TRANSPORTATION SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	113,324	3,030	1,050.3	5,761	Neg.	--	8	29	8,820
1948	98,295	2,624	1,126.6	6,157	Neg.	--	8	27	8,808
1949	70,915	1,892	1,137.8	6,183	Neg.	--	7	25	8,100
1950	63,783	1,701	1,248.8	6,785	125,546	130	7	24	8,640
1951	56,903	1,525	1,377.5	7,482	192,496	199	7	23	9,229
1952	40,428	1,086	1,451.3	7,868	207,207	214	6	22	9,190
1953	30,074	809	1,511.5	8,158	230,314	238	6	20	9,225
1954	19,060	516	1,551.4	8,358	230,615	239	6	18	9,131
1955	17,429	464	1,691.4	9,109	245,246	253	6	19	9,845
1956	14,187	378	1,756.2	9,448	295,972	306	5	17	10,149
1957	10,126	270	1,832.0	9,649	299,235	310	4	15	10,244
1958	5,015	133	1,825.1	9,819	312,221	323	5	16	10,291
1959	3,861	102	1,849.4	9,923	349,348	362	5	17	10,404
1960	3,294	87	1,934.1	10,372	347,075	359	5	18	10,836
1961	770	21	1,971.9	10,575	377,607	390	6	19	11,005
1962	687	18	2,051.3	11,001	382,496	396	5	18	11,433
1963	670	18	2,146.7	11,506	423,783	438	6	19	11,981
1964	711	19	2,198.9	11,791	435,570	451	6	20	12,281
1965	655	18	2,271.9	12,179	500,524	517	5	18	12,732
1966	609	16	2,382.6	12,777	535,353	552	5	16	13,361
1967	467	13	2,497.1	13,408	575,752	594	5	17	14,032
1968	417	11	2,703.8	14,535	590,965	610	5	18	15,174
1969	313	8	2,815.8	15,125	630,962	651	5	17	15,801

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior. W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000," December 1972.

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE TRANSPORTATION SECTOR

Year	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	298	8	2,923.8	15,720	772,166	745	5	16	16,489
1971	207	6	3,035.1	16,304	742,592	766	5	17	17,093
1972	163	4	3,217.5	17,290	766,156	787	5	17	18,098
1973	112	3	3,302.0	17,821	728,431	743	3	8	18,575
1974	38	2	3,225.1	17,396	668,945	685	3	9	18,091
1975	0	1	3,265.9	17,610	583,333	595	3	10	18,215
1976	0	0	3,428.3	18,499	548,577	559	3	10	19,068
1977	0	0	3,559.8	19,230	532,875	543	3	10	19,783
1978	0	0	3,702.4	20,019	530,512	539	3	9	20,567
1979	0	0	3,649.5	19,817	601,179	612	3	10	20,439
1980	0	0	3,494.3	19,009	634,766	650	3	11	19,669
1981	0	0	3,459.7	18,800	641,951	658	3	11	19,470
1982	0	0	3,396.3	18,418	596,491	612	3	11	19,040
1983	0	0	3,432.8	18,592	489,817	505	3	11	19,108
1984	0	0	3,558.0	19,295	529,126	545	4	13	19,852
1985	0	0	3,607.8	19,558	503,395	519	4	14	20,091
1986	0	0	3,731.3	20,235	484,937	499	4	12	20,746
1987	0	0	3,801.8	20,606	498,542	513	4	13	21,133

(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1987: Energy Information Administration, Monthly Energy Review

Section I
Table 12

UNITED STATES
DEMAND FOR ENERGY INPUTS FOR ELECTRICITY GENERATION BY UTILITIES

	COAL(1)		PETROLEUM		NATURAL GAS		HYDROPOWER(2)		NUCLEAR POWER		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Trillion Btu
1947	89,531	2,084	75.5	468	373,037	386	84,981	1,326	--	--	4,264
1948	99,586	2,392	71.7	444	478,097	495	88,535	1,393	--	--	4,724
1949	83,964	2,021	92.7	577	550,121	569	96,361	1,449	--	--	4,616
1950	91,871	2,228	106.3	662	628,919	651	102,671	1,440	--	--	4,981
1951	105,768	2,537	80.1	499	763,898	791	106,554	1,454	--	--	5,281
1952	107,071	2,588	78.8	492	910,117	942	111,977	1,496	--	--	5,518
1953	115,883	2,805	92.3	577	1,034,272	1,070	111,625	1,439	--	--	5,891
1954	118,401	2,866	76.8	480	1,165,498	1,206	113,980	1,388	--	--	5,940
1955	143,759	3,482	81.9	512	1,153,280	1,194	120,304	1,407	--	--	6,595
1956	158,279	3,815	79.4	497	1,239,311	1,283	129,775	1,487	--	--	7,082
1957	160,761	3,881	81.9	512	1,338,079	1,385	136,959	1,551	10	1	7,330
1958	155,714	3,743	82.4	515	1,372,853	1,421	147,581	1,636	165	2	7,317
1959	168,427	4,050	87.2	546	1,627,097	1,684	145,002	1,591	188	2	7,873
1960	176,633	4,251	90.1	564	1,724,763	1,785	153,958	1,657	518	6	8,263
1961	182,138	4,374	92.1	577	1,825,341	1,889	157,754	1,680	1,692	17	8,537
1962	193,128	4,636	92.4	579	1,965,590	2,034	172,458	1,821	2,270	23	9,093
1963	211,193	5,065	95.7	600	2,142,930	2,218	168,573	1,767	3,212	33	9,683
1964	225,271	5,395	101.4	636	2,321,889	2,403	182,258	1,907	3,341	34	10,375
1965	244,887	5,843	118.6	744	2,318,253	2,392	196,843	2,058	3,657	38	11,075
1966	266,394	6,327	144.2	905	2,608,768	2,692	199,030	2,073	5,520	57	12,054
1967	273,970	6,457	161.3	1,013	2,746,352	2,834	224,650	2,344	7,655	80	12,728
1968	296,942	6,994	188.0	1,181	3,143,858	3,245	225,242	2,342	12,528	130	13,892
1969	310,310	7,227	259.8	1,628	3,486,391	3,594	254,540	2,659	13,928	146	15,254
1970	322,357	7,261	333.8	2,087	3,894,019	4,015	252,571	2,650	21,801	229	16,242
1971	327,926	7,330	407.1	2,543	3,992,983	4,117	269,899	2,828	37,899	404	17,222
1972	350,196	7,836	503.7	3,134	3,978,673	4,086	280,470	2,911	54,032	576	18,543
1973	388,194	8,658	562.9	3,515	3,660,156	3,748	286,361	2,975	83,463	910	19,853
1974	391,809	8,534	539.4	3,365	3,443,249	3,519	313,733	3,276	113,968	1,272	20,022

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(1) Includes anthracite, bituminous, and lignite coals
(2) Includes net inputs and negligible amount of hydropower generated by industrial establishments

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000", December 1972
1970-1972: U.S. Bureau of Mines, Minerals Yearbook 1975
1973-1974: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

UNITED STATES
DEMAND FOR ENERGY INPUTS FOR ELECTRICITY GENERATION BY UTILITIES

	COAL(1)		PETROLEUM		NATURAL GAS		HYDROPOWER(2)		NUCLEAR POWER		TOTAL ENERGY INPUTS(3)
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Trillion Btu
1975	405,970	8,786	506.6	3,166	3,157,895	3,240	306,266	3,187	172,523	1,900	20,350
1976	448,360	9,720	556.2	3,477	3,081,134	3,152	292,297	3,032	191,093	2,111	21,573
1977	477,125	10,262	624.3	3,901	3,191,448	3,284	237,853	2,482	250,905	2,702	22,713
1978	481,222	10,238	637.8	3,987	3,188,588	3,297	300,164	3,110	276,392	3,024	23,724
1979	527,055	11,260	524.6	3,283	3,490,821	3,613	300,106	3,107	255,171	2,776	24,128
1980	569,289	12,123	421.2	2,634	3,681,159	3,810	296,918	3,085	251,128	2,739	24,505
1981	596,775	12,583	351.9	2,202	3,640,580	3,768	293,887	3,072	272,711	3,008	24,760
1982	593,659	12,582	250.6	1,568	3,225,869	3,342	338,482	3,528	282,760	3,131	24,260
1983	625,231	13,213	246.8	1,544	2,910,680	2,998	367,449	3,838	293,718	3,203	24,929
1984	664,423	14,020	205.7	1,286	3,111,111	3,220	360,787	3,684	327,677	3,553	25,937
1985	693,831	14,542	174.5	1,090	3,044,316	3,160	322,081	3,330	383,662	4,147	26,482
1986	685,069	14,444	232.1	1,452	2,602,515	2,691	336,434	3,472	414,083	4,475	26,665
1987	717,871	15,188	201.2	1,257	2,844,294	2,941	291,570	3,009	476,744	4,920	27,559

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes net inputs and negligible amount of hydropower generated by industrial establishments.
(3) Total includes small amounts of geothermal power and electricity from wood and waste.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

WORLD PRIMARY ENERGY PRODUCTION(1)
(Quadrillion Btu)

Region and Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Canada	9.50	9.38	8.89	8.68	9.03	9.14	9.99	10.04	9.75	9.64	10.11
Mexico	1.87	2.15	2.44	2.74	3.14	3.76	4.51	5.80	6.78	7.82	7.70
United States	61.95	60.72	59.73	59.81	60.14	61.03	63.71	64.64	64.30	63.79	61.08
Total North America	73.32	72.25	71.06	71.22	72.31	73.93	78.22	80.48	80.83	81.25	78.90
Venezuela	8.13	7.29	5.90	5.79	5.69	5.52	6.04	5.71	5.58	5.22	4.99
Total Central & South America	12.85	12.09	10.62	10.67	10.88	11.19	12.23	12.15	12.13	12.04	12.21
France	1.78	1.82	1.88	1.71	2.00	2.02	2.03	2.26	2.65	2.62	2.97
West Germany	4.92	4.95	4.87	5.14	5.12	5.12	5.44	5.44	5.57	5.72	5.53
Italy	1.06	1.07	1.08	1.11	1.15	1.13	1.10	1.07	1.11	1.16	1.12
Netherlands	2.52	2.86	3.16	3.44	2.90	2.49	2.69	3.32	3.10	2.67	2.62
Norway	.83	.88	1.22	1.47	1.47	2.07	2.68	3.02	3.06	3.11	3.41
United Kingdom	4.66	4.47	4.97	5.39	6.58	7.19	8.24	8.40	8.71	9.49	9.92
Total Western Europe	19.58	20.01	21.36	22.34	23.93	24.81	27.40	28.65	29.73	30.65	31.86
Iran	13.27	13.68	12.23	13.43	12.88	11.93	7.46	3.91	3.28	5.12	5.67
Iraq	4.35	4.25	4.89	5.25	5.08	5.53	7.49	5.45	2.16	2.19	2.17
Kuwait	6.75	5.67	4.68	4.84	4.46	4.90	5.78	3.88	2.70	1.98	2.51
Saudi Arabia	16.63	18.68	15.68	18.88	20.51	18.45	21.24	22.48	22.57	14.86	11.69
United Arab Emirates	3.27	3.56	3.56	4.20	4.45	4.09	4.12	3.89	3.45	3.00	2.91
Total Middle East	46.61	48.33	43.58	49.13	49.77	47.30	48.65	42.13	36.73	29.54	27.29
Algeria	2.47	2.35	2.34	2.65	2.63	3.28	3.16	2.75	2.95	3.11	3.46
Libya	4.72	3.32	3.27	4.26	4.53	4.40	4.63	4.03	2.57	2.61	2.52
Nigeria	4.45	4.89	3.88	4.51	4.50	4.06	4.95	4.50	3.18	2.86	2.77
South Africa	1.48	1.57	1.65	1.84	2.03	2.15	2.46	2.74	3.09	3.24	3.45
Total Africa	14.81	13.93	13.19	15.49	16.44	16.70	18.10	17.35	15.09	15.42	16.12
Australia	3.25	3.44	3.64	3.35	3.43	3.51	3.66	3.53	3.89	4.04	4.24
China	13.14	14.25	15.11	15.35	16.16	18.05	18.53	18.32	18.10	19.13	20.46
India	2.22	2.36	2.68	2.88	2.95	3.14	3.30	3.35	4.09	4.43	4.87
Indonesia	2.90	2.99	2.90	3.38	3.85	3.71	3.83	4.16	4.27	3.65	3.84
Total Far East & Oceania	26.17	28.04	29.71	30.59	32.09	34.53	35.99	36.53	37.47	38.90	41.54
Poland	4.94	5.09	5.37	5.00	5.18	5.36	5.51	5.28	4.54	5.16	5.25
USSR	39.28	41.77	43.62	47.46	49.79	52.11	53.88	55.67	56.71	58.27	59.96
Total Eastern Europe & USSR	51.44	54.17	56.51	60.23	62.95	65.40	67.52	69.20	69.67	72.18	74.15
TOTAL WORLD	244.78	248.81	246.03	259.67	268.37	273.87	288.31	286.50	281.66	279.98	282.07

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(1) Includes only crude oil, lease condensate, natural gas plant liquids, dry natural gas, coal, net hydroelectric power and net nuclear power.

Source: Department of Energy, Energy Information Administration, International Energy Annual.

Section I
Table 13a

WORLD PRIMARY ENERGY PRODUCTION(1)
(Quadrillion BTU)

REGION AND COUNTRY	1984	1985	1986	1987(p)
Canada	10.98	11.76	11.67	12.17
Mexico	7.88	7.74	7.15	7.38
United States	65.67	64.55	63.99	64.35
Total North America	84.53	84.06	82.81	83.90
Venezuela	5.02	4.77	5.14	5.09
Total Central & South America	13.13	13.43	14.08	14.08
France	3.38	3.56	3.82	3.94
West Germany	5.73	6.03	5.77	5.79
Italy	1.17	1.18	1.26	1.18
Netherlands	2.71	2.82	2.71	2.78
Norway	3.65	3.82	3.97	4.48
United Kingdom	8.86	10.18	10.63	10.47
Total Western Europe	32.33	34.91	35.76	36.73
Iran	5.29	5.57	5.06	5.94
Iraq	2.61	3.09	3.66	4.55
Kuwait	2.76	2.44	3.36	3.23
Saudi Arabia	11.29	8.55	11.91	10.56
United Arab Emirates	3.00	3.29	3.68	4.12
Total Middle East	27.66	25.67	30.63	31.54
Algeria	3.71	3.77	3.56	3.75
Libya	2.53	2.46	2.43	2.28
Nigeria	3.12	3.35	3.33	3.03
South Africa	3.87	4.17	4.26	4.22
Total Africa	17.53	18.44	18.18	18.29
Australia	4.42	5.34	5.49	5.99
China	22.39	24.14	24.90	26.08
India	5.21	5.52	5.96	5.77
Indonesia	4.27	4.24	4.33	4.28
Total Far East & Oceania	45.10	48.99	51.10	52.95
Poland	5.37	5.54	5.72	5.86
USSR	62.00	63.81	66.38	68.46
Total Eastern Europe & USSR	76.51	78.64	81.49	83.84
TOTAL WORLD	296.79	304.12	314.05	321.33

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(1) Includes only crude oil, lease condensate, natural gas plant liquids, dry natural gas, coal, net hydroelectric power and net nuclear power.

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

Section I
Table 14

WORLD COAL PRODUCTION(1)
(Million Short Tons)

Region and Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Canada	23	23	28	28	32	34	37	40	44	47	50	63
Mexico	5	6	6	6	7	7	8	8	8	8	10	10
United States	599	610	655	685	697	670	781	830	824	838	782	896
Total North America	626	639	688	719	736	711	826	878	876	894	841	969
Total Central & South America	8	9	9	10	10	10	16	16	14	16	16	18
West Germany	238	244	238	247	229	228	239	239	241	247	236	233
United Kingdom	143	121	142	137	135	136	135	141	138	137	127	55
Yugoslavia	36	37	39	41	43	44	46	52	58	60	65	72
Total Western Europe	508	488	509	518	506	509	529	543	561	577	571	510
South Africa	69	73	77	85	94	100	114	127	144	151	161	179
Total Africa	75	78	82	91	100	106	121	133	149	157	167	184
Australia	94	100	105	109	111	114	119	116	130	140	146	153
China	520	548	570	586	606	681	698	684	683	734	788	870
India	89	96	109	116	115	116	118	125	142	148	158	168
Total Middle East, Far East & Oceania	800	842	890	911	934	1,014	1,042	1,036	1,068	1,136	1,205	1,307
Czechoslovakia	120	122	127	130	134	136	137	136	137	139	140	143
East Germany	272	269	272	273	280	279	282	285	294	304	309	327
Poland	216	222	233	241	250	258	264	254	219	250	258	267
U.S.S.R.	736	755	773	784	796	798	792	790	776	792	789	785
Total Eastern Europe & USSR	1,431	1,454	1,494	1,513	1,546	1,560	1,571	1,566	1,529	1,593	1,601	1,635
TOTAL WORLD	3,447	3,511	3,673	3,763	3,834	3,911	4,105	4,173	4,198	4,375	4,402	4,623

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(1) Includes anthracite, subanthracite, bituminous, subbituminous, lignite and brown coal.

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

WORLD COAL PRODUCTION(1)
(Million Short Tons)

Region and Country	1985	1986	1987(p)
Canada	67	64	67
Mexico	9	9	9
United States	884	890	917
Total North America	960	964	993
Total Central & South America	21	23	24
West Germany	231	222	211
United Kingdom	104	119	115
Yugoslavia	75	77	83
Total Western Europe	570	584	577
South Africa	192	195	194
Total Africa	198	201	201
Australia	186	187	206
China	937	959	1,014
India	173	188	203
Total Middle Ease, Far East & Oceania	1,422	1,463	1,552
Czechoslovakia	140	139	139
East Germany	344	343	342
Poland	275	286	293
U.S.S.R.	798	825	830
Total Eastern Europe & USSR	1,671	1,709	1,723
TOTAL WORLD	4,844	4,944	5,071

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(1) Includes anthracite, subanthracite, bituminous, subbituminous, lignite and brown coal.
NA=Not Available

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

Section I
Table 15

U.S. GOVERNMENT ENERGY USE BY AGENCY, BY SOURCE
(Fiscal Year, Trillion BTU)

1977

	Petroleum							
AGENCY	Motor Gasoline	Distillate and Residual Fuel Oils	Other(1)	Total	Electricity	Natural Gas	Coal and Other(2)	Total
Defense	31.9	308.4	623.3	936.6	291.2	98.0	45.7	1,398.4
Energy	1.3	5.2	0.4	6.9	51.4	9.9	19.7	87.9
Postal Service	10.8	3.8	0.1	14.7	42.2	4.4	1.6	62.9
GSA	0.2	2.7	0	2.9	29.3	4.1	4.9	37.9
Veteran's Admin.	0.6	7.3	0	7.9	16.4	12.0	1.7	41.1
Transportation	1.6	8.3	5.7	15.5	11.7	1.2	0.3	28.8
NASA	0.4	1.5	1.3	3.2	16.5	3.1	1.2	24.0
Agriculture	4.9	1.2	0.3	6.3	2.7	1.7	0	10.8
Interior	2.8	2.5	0.6	5.9	5.6	1.9	0.1	13.8
Health & Human Serv.	0.7	3.1	0.1	3.9	4.2	1.7	0.1	9.9
Justice	2.0	0.9	0.1	3.0	2.3	1.9	0.5	7.5
Other(3)	3.8	3.7	0.4	7.9	6.3	1.3	0.4	15.9
TOTAL	60.9	348.5	632.1	1,041.6	479.7	141.2	76.1	1,738.6

1987

	Petroleum							
AGENCY	Motor Gasoline	Distillate and Residual Fuel Oils	Other(1)	Total	Electricity	Natural Gas	Coal and Other(2)	Total
Defense(p)	20.2	273.0	697.5	990.7	352.6	100.4	52.4	1,497.8
Energy	1.4	3.1	0.6	5.1	63.5	6.1	18.5	93.2
Postal Service	9.2	3.9	0.2	13.3	34.9	4.3	1.0	53.4
GSA	0.1	0.5	0	0.6	26.3	2.4	3.0	32.4
Veteran's Admin.	0.5	2.4	0	2.9	24.3	13.7	1.2	42.0
Transportation	1.2	7.5	5.4	14.1	13.1	1.1	0	28.3
NASA	0.2	0.9	1.3	2.3	19.7	2.6	0.4	25.1
Agriculture	3.4	0.3	0.2	3.9	5.9	1.6	0	11.4
Interior	2.0	1.3	0.9	4.2	4.2	1.0	0.2	9.7
Health & Human Serv.	0.4	2.5	0.1	3.0	6.6	1.6	0	11.2
Justice(p)	1.9	0.4	0.1	2.4	4.1	1.7	0.5	8.7
Other(3)(p)	3.0	1.9	0.7	5.7	8.1	1.5	0.3	17.1
TOTAL	43.5	297.7	707.0	1,048.2	563.3	138.0	80.2	1,830.3

(p) Preliminary.
(1) Includes aviation gasoline, jet fuel, and liquefield petroleum gases.
(2) Includes purchased steam.
(3) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review 1987.

U.S. GOVERNMENT ENERGY USE(1)
(Fiscal Year, Trillion BTU)

AGENCY	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Defense	1,558.1	1,386.8	1,398.4	1,365.7	1,384.6	1,394.8	1,455.4	1,484.3	1,475.1	1,524.1	1,509.6
Energy	85.2	87.2	87.9	87.1	86.9	84.0	85.3	89.1	91.3	95.5	96.7
Postal Service	59.2	58.3	62.9	58.6	56.0	52.3	50.9	49.4	48.4	50.5	50.9
GSA	43.0	41.1	41.1	41.3	40.5	38.9	39.1	38.9	37.8	35.4	35.4
Veteran's Admin.	39.2	36.5	37.9	39.4	38.5	38.2	37.4	38.0	38.7	40.6	40.6
Transportation	28.5	27.4	28.8	28.9	27.6	27.6	28.0	28.5	28.7	29.5	29.5
NASA	26.4	25.1	24.0	22.4	22.4	21.4	21.2	21.8	22.4	23.0	23.3
Agriculture	11.9	11.6	10.8	11.2	11.6	11.2	10.9	10.4	10.4	10.7	10.2
Interior	12.3	13.1	13.5	12.3	13.6	11.7	10.7	10.7	10.8	11.8	10.6
Health & Human Serv.	9.3	9.6	9.9	9.6	9.7	9.5	10.6	10.2	10.3	10.8	11.3
Justice	7.1	7.1	7.5	7.4	8.1	7.4	7.1	7.7	7.6	8.9	8.1
Other(2)	14.8	15.0	15.9	17.1	16.8	16.6	17.1	18.5	17.1	17.7	16.5
TOTAL	1,895.0	1,718.9	1,738.6	1,701.0	1,716.3	1,713.5	1,773.7	1,807.5	1,798.6	1,860.2	1,842.7

ENERGY SOURCE	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Petroleum	1,162.0	1,015.8	1,041.5	1,002.3	1,012.7	1,011.5	1,065.8	1,082.5	1,060.7	1,093.6	1,067.4
Motor Gasoline	63.4	59.9	60.9	59.6	58.6	56.1	52.9	52.9	51.4	51.0	50.5
Aviation Gasoline	21.1	11.6	8.8	6.2	4.7	4.9	4.6	3.6	2.6	1.9	1.9
Jet Fuel	707.4	610.0	619.2	601.2	618.6	638.7	653.3	672.7	673.3	693.7	705.6
Distillate & Residual	364.7	329.7	348.5	332.3	327.1	307.8	351.3	349.5	329.4	342.9	305.4
LPG's	5.4	4.6	4.1	3.0	3.7	4.0	3.7	3.8	4.0	4.1	4.0
Electricity	481.2	473.5	479.7	479.2	479.9	482.2	491.5	501.6	515.2	530.1	548.2
Natural Gas	166.2	151.8	141.2	144.7	148.9	147.3	142.2	146.2	147.8	157.4	146.7
Coal	77.9	71.3	68.4	66.0	65.1	63.6	65.1	68.6	62.4	65.3	64.0
Purchased Steam	7.6	6.3	7.7	8.7	9.7	9.1	9.1	8.6	12.4	13.8	16.4
TOTAL	1,895.0	1,718.9	1,738.6	1,701.0	1,716.3	1,713.5	1,773.7	1,807.5	1,798.6	1,860.2	1,842.7

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(1) Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. However, other energy used by U.S. agencies that produce electricity or enrich uranium is included.

(2) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission, and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review.

U.S. GOVERNMENT ENERGY USE(1)
(Fiscal Year, Trillion BTU)

AGENCY	1986	1987(p)
Defense	1,488.1	1,497.8
Energy	92.0	93.2
Postal Service	51.5	53.4
GSA	34.1	32.4
Veteran's Admin.	41.8	42.0
Transportation	28.1	28.3
NASA	24.6	25.1
Agriculture	10.6	11.4
Interior	10.0	9.7
Health & Human Serv.	10.7	11.2
Justice	8.7	8.7
Other(2)	16.8	17.1
TOTAL	1,817.0	1,830.3
ENERGY SOURCE		
Petroleum	1,058.8	1,048.2
Motor Gasoline	45.3	43.5
Aviation Gasoline	1.4	0.9
Jet Fuel	710.2	702.3
Distillate & Residual	298.0	297.7
LPG's	3.9	3.8
Electricity	539.8	563.3
Natural Gas	138.7	138.0
Coal	63.8	60.5
Purchased Steam	15.9	19.7
TOTAL	1,817.0	1,830.3

(p) Preliminary.

(1) Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. however, other energy used by U.S. agencies that produce electricity or enrich uranium is included.

(2) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission, and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review 1987.

SECTION II. RESERVES, CRUDE OIL

Table 1.	Estimated Proved World Reserves of Crude Oil
Table 2.	The Reserves of United States Crude Oil
Table 3.	U.S. Proved Crude Oil Reserves by State
Table 4.	Estimated World Proven Crude Oil Reserves -- Twenty Leading Nations
Table 5.	USGS Estimates of U.S. Oil and Gas Resources

ESTIMATED PROVED RESERVES OF CRUDE OIL
ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	United States	Canada	Latin America	Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist Nations	Total World
1948	21,487.7	125.0	10,085.0	31,697.7	28,550.0	100.0	1,300.0	50.0	61,697.7	6,500.0	68,197.7
1949	23,280.4	500.0	10,880.0	34,660.4	32,621.0	122.0	1,372.0	179.0	68,954.4	4,645.0	73,599.4
1950	24,649.5	1,200.0	11,400.8	37,250.3	32,413.0	202.5	1,557.0	289.0	71,711.7	4,741.0	76,452.7
1951	25,268.4	1,202.6	11,525.0	37,996.0	41,567.0	188.0	1,765.0	445.4	81,961.4	7,965.0	89,926.4
1952	27,468.0	1,376.6	12,710.9	41,555.5	51,320.0	175.0	1,965.5	501.5	95,517.5	7,927.0	103,444.5
1953	27,960.6	1,679.5	11,883.5	41,523.6	64,825.0	163.0	2,062.0	472.7	109,046.3	9,408.0	118,454.3
1954	28,944.8	1,845.4	13,182.0	43,972.3	78,160.0	158.0	2,583.0	641.5	125,514.8	9,455.0	134,969.8
1955	29,560.7	2,207.6	14,356.0	46,124.4	97,459.0	112.0	2,708.0	1,049.2	147,452.6	10,047.0	157,499.6
1956	30,012.2	2,509.5	15,515.0	48,036.7	126,271.0	169.0	3,000.0	1,261.0	178,737.7	10,833.0	189,570.7
1957	30,434.6	2,849.4	17,474.0	50,758.0	144,470.0	285.0	6,140.0	1,305.0	202,958.0	25,000.0	227,958.0
1958	30,300.4	2,874.6	21,003.5	54,178.4	169,566.0	814.0	8,578.0	1,304.0	234,440.4	26,200.0	260,640.4
1959	30,535.9	3,165.9	21,843.0	55,544.8	173,951.0	4,118.5	9,646.5	1,437.0	244,697.8	27,705.0	272,402.8
1960	31,719.3	3,497.1	24,435.6	59,652.1	181.436.0	7,273.5	10,175.5	1,496.0	260,033.1	30,002.0	290,035.1
1961	31,613.2	3,678.5	25,061.8	60,353.6	183,160.0	8,099.5	10,906.5	1,722.0	264,241.6	33,502.0	297,743.6
1962	31,758.5	4,173.6	24,706.0	60,638.1	188,204.0	9,709.5	10,867.6	1,736.0	271,155.2	34,252.0	305,407.2
1963	31,389.2	4,480.7	24,225.5	60,095.4	193,975.0	12,345.5	11,331.1	1,791.0	279,538.0	29,976.0	309,514.0
1964	30,970.0	4,881.5	24,305.0	60,156.5	207,368.0	16,375.5	11,621.2	1,925.6	297,446.8	29,500.0	326,946.8
1965	30,990.5	6,177.5	25,525.0	62,693.1	212,180.0	19,395.6	11,613.7	2,035.6	307,918.0	30,750.0	338,668.0
1966	31,352.4	6,711.2	25,170.5	63,234.1	215,360.0	23,049.0	11,008.8	2,085.0	314,736.9	33,377.0	348,118.9
1967	31,452.1	7,791.8	27,100.3	66,344.2	235,614.6	32,355.5	11,808.5	1,924.5	348,047.3	33,838.0	381,885.3
1968	31,376.7	8,168.9	26,907.3	66,452.8	249,209.0	42,285.3	11,815.9	2,017.0	371,780.0	35,773.0	407,553.0
1969	30,707.1	8,381.6	28,782.8	67,871.5	270,760.0	44,568.8	13,720.2	1,937.0	398,857.5	55,877.0	454,734.5
1970	29,631.9	8,619.8	29,179.8	67,431.4	333,506.0	54,679.5	13,138.2	1,779.0	470,534.1	60,000.0	530,534.1
1971	39,001.3	8,559.0	26,185.3	73,745.6	344,574.9	74,757.5	14,408.6	3,708.5	511,195.1	100,000.0	611,195.1
1972	38,063.0	8,333.1	31,558.8	77,954.8	367,386.0	58,886.2	15,604.5	14,222.0	534,053.5	98,500.0	632,553.5
1973	36,339.4	8,020.1	32,601.8	76,961.3	355,852.0	106,402.0	14,922.3	12,082.0	566,219.6	98,000.0	664,219.6
1974	35,299.8	7,674.2	31,640.3	74,614.2	350,162.5	67,303.8	15,635.0	15,991.0	523,706.5	103,000.0	626,706.5
1975	34,250.0	7,171.2	40,578.0	81,999.2	403,858.2	68,299.5	21,047.7	25,814.0	601,018.5	111,400.0	712,418.5
1976	32,682.1	6,653.0	35,368.0	74,703.1	368,410.6	65,085.2	21,234.2	25,487.7	554,920.8	103,000.0	657,920.8
1977	33,502.0	6,247.1	29,609.0	69,358.0	367,681.2	60,570.2	19,391.1	24,538.8	541,539.4	101,100.0	642,639.4
1978	31,780.0	5,970.9	40,270.0	78,020.9	366,166.0	59,200.2	19,749.3	26,862.5	549,998.8	98,000.0	647,998.8
1979	31,355.0	6,860.0	41,246.5	79,461.5	369,996.0	57,892.1	20,007.2	23,966.0	551,322.8	94,000.0	645,322.8
1980	27,051.3	6,800.0	56,472.5	90,323.8	361,947.3	57,072.1	19,355.2	23,476.4	522,174.8	90,000.0	642,174.8
1981	29,805.0	6,400.0	69,489.8	105,694.8	362,071.0	55,148.4	19,630.5	23,085.0	565,629.7	86,300.0	651,929.7
1982	29,426.0	7,300.0	84,982.3	121,708.3	362,840.0	56,171.6	19,150.8	24,634.5	584,505.2	85,845.0	670,350.2
1983	27,858.0	7,020.0	78,482.1	113,360.1	369,285.9	57,821.7	19,756.1	22,923.7	583,147.4	85,115.0	668,262.4
1984	27,735.0	6,730.0	81,675.9	116,140.9	370,100.8	56,907.0	18,969.4	23,019.5	585,137.6	84,600.0	669,737.6
1985	28,446.0	7,075.0	83,315.7	117,690.7	398,380.8	55,540.6	18,529.9	24,425.5	615,713.4	84,100.0	699,813.4

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(1) For 1971-1974 figures include 6 billion barrels in Prudhoe Bay, Permo-Triassic Reservoir, Alaska (discovered in 1968) which are not yet available for production due to lack of transportation facilities.

Source: 1948-1976--United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
1977-1985--United States, U.S. Energy Information Administration
Canada, Canadian Petroleum Association (1952-1980)
Rest of the World, Oil and Gas Journal, "Worldwide Report" Issues

ESTIMATED PROVED RESERVES OF CRUDE OIL ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist Nations	Total World
1986	28,416.0	6,500.0	84,242.4	119,158.4	398,035.7	56,734.1	18,855.8	26,412.6	619,196.6	81,370.0	700,566.6
1987	26,889.0	6,850.0	88,755.3	122,494.3	401,878.7	55,194.1	19,023.5	21,938.1	620,528.7	79,250.0	699,778.7
1988	27,256.0	6,825.0	114,332.0	148,413.0	564,680.3	55,249.7	19,353.7	22,447.8	810,144.5	79,200.0	889,344.5

Source: U.S.--DOE/EIA, Crude Oil, Natural Gas and Natural Gas Liquids Reserves Report, Annual.
Rest of World--Oil and Gas Journal, "Worldwide Report" issue.

THE RESERVES OF UNITED STATES CRUDE OIL
(Thousands of barrels)

Year	Proved Reserves at Start of Year	Revisions Extensions and Discoveries, During Year	Production During Year (1)	Proved Reserves at Year-end	Indicated Years Supply of Year-end Proved Reserves
1947	20,873,560	2,464,570	1,850,445	21,487,685	11.6
1948	21,487,685	3,795,207	2,002,448	23,280,444	11.6
1949	23,280,444	3,187,845	1,818,800	24,649,489	13.6
1950	24,649,489	2,562,685	1,943,776	25,268,398	13.0
1951	25,268,398	4,413,954	2,214,321	27,468,031	12.4
1952	27,468,031	2,749,288	2,256,7[illegible]	27,960,554	12.4
1953	27,960,554	3,296,130	2,311,85[illegible]	28,944,828	12.5
1954	28,944,828	2,873,037	2,257,119	29,560,746	13.1
1955	29,560,746	2,870,[illegible]24	2,419,300	30,012,170	12.4
1956	30,012,170	2,974,336	2,551,857	30,434,649	11.9
1957	30,434,649	2,424,800	2,559,044	30,300,405	11.8
1958	30,300,405	2,608,242	2,372,730	30,535,917	12.9
1959	30,535,917	3,666,745	2,483,315	31,719,347	12.8
1960	31,719,347	2,365,328	2,471,464	31,613,211	12.8
1961	31,613,211	2,657,567	2,512,273	31,758,505	12.6
1962	31,758,505	2,180,896	2,550,178	31,389,223	12.3
1963	31,389,223	2,174,110	2,593,343	30,969,990	11.9
1964	30,969,990	2,664,767	2,644,247	30,990,510	11.7
1965	30,990,510	3,048,079	2,686,198	31,352,391	11.7
1966	31,352,391	2,963,978	2,864,242	31,452,127	11.0
1967	31,452,127	2,962,122	3,037,579	31,376,670	10.3
1968	31,376,670	2,454,635	3,124,188	30,707,117	9.8
1969	30,707,117	2,[illegible]20,036	3,195,291	29,631,862	9.3
1970	29,631,862	12,688,918(2)	3,319,445	39,001,335(2)	11.7(2)
1971	39,001,335(2)	2,317,732	3,256,110	38,062,957(2)	11.7(2)
1972	38,062,957(2)	1,557,848	3,281,397	36,339,408(2)	11.1(2)
1973	36,339,408(2)	2,145,831	3,185,400	35,299,839(2)	11.1(2)
1974	35,299,839(2)	1,993,573	3,043,456	34,249,956(2)	11.3(2)

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(1) Production is the amount originally estimated and used by API in prior reserves reports.
(2) Figures include 9.6 billion barrels located in Prudhoe Bay, Alaska (discovered in 1968).

Source: American Petroleum Institute, Committee on Reserves and Productive Capacity.

THE RESERVES OF UNITED STATES CRUDE OIL
(Thousands of barrels)

Year	Proved Reserves at Start of Year	Revisions Extensions and Discoveries, During Year	Production During Year (1)	Proved Reserves at Year-end	Indicated Years Supply of Year-end Proved Reserves
1975	34,249,956(2)	1,318,463	2,886,292	32,682,127(2)	11.3(2)
1976	32,682,127(2)	1,085,291	2,825,252	30,942,166(2)	11.0(2)
1977(3)	33,502,000	1,140,000	2,862,000	31,780,000	11.1
1978	31,780,000	2,583,000	3,008,000	31,355,000	10.4
1979	31,355,000	1,410,000	2,955,000	29,810,000	10.1
1980	29,810,000	2,970,000	2,975,000	29,805,000	10.0
1981	29,805,000	2,570,000	2,949,000	29,426,000	10.0
1982	29,426,000	1,382,000	2,950,000	27,858,000	9.4
1983	27,858,000	2,897,000	3,020,000	27,735,000	9.2
1984	27,735,000	3,748,000	3,037,000	28,446,000	9.4
1985	28,446,000	3,022,000	3,052,000	28,416,000	9.3
1986	28,416,000	1,446,000	2,973,000	26,889,000	9.0
1987	26,889,000	3,240,000	2,873,000	27,256,000	9.5

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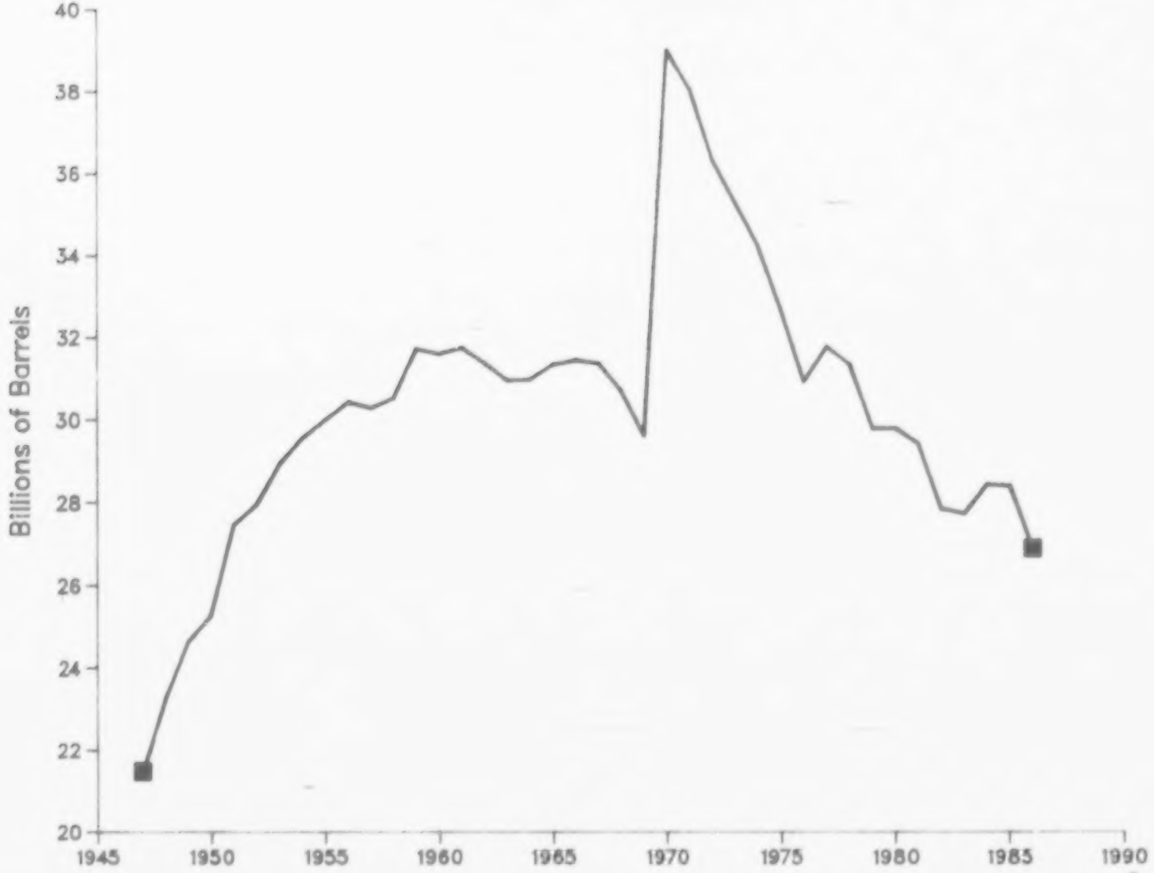
(1) Production is the amount originally estimated and used by API in prior reserves reports (through 1979).

(2) Figures include approximately 10.0 billion barrels located in Prudhoe Bay, Alaska.

(3) Beginning in 1977, crude oil reserves estimates come from the Department of Energy. Therefore, reserves at year-end 1976 do not equal reserves at start of year 1977. These figures include crude oil only, i.e., they exclude lease condensate.

Source: American Petroleum Institute, Committee on Reserves
1977-1987: U.S. Department of Energy, U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves

U.S. CRUDE OIL RESERVES



Source: API and Department of Energy

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Alabama	2.8	3.5	3.5	5.4	7.9	15.6	17.2	15.6	20.6	37.5	34.4	38.6	34.2
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	296.9	300.0	297.5	341.7	336.5	352.3	358.2	351.4	329.5	317.7	305.0	317.9	312.9
California	3,295.0	3,763.6	3,822.8	3,733.6	3,760.9	3,854.2	3,919.4	3,888.6	3,801.4	3,771.4	3,759.8	3,866.4	3,762.5
Colorado	381.9	365.5	344.8	339.5	325.2	305.7	319.3	328.7	334.0	363.8	309.9	392.1	381.0
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Illinois	355.4	393.4	468.1	564.2	646.3	619.5	624.8	658.4	691.2	700.0	654.7	607.6	594.4
Indiana	46.0	49.1	50.2	57.4	50.7	55.5	62.1	67.2	61.5	67.7	66.7	71.5	74.0
Kansas	562.7	674.4	738.4	732.2	791.9	917.0	913.3	978.4	998.1	992.2	947.5	992.4	917.5
Kentucky	64.6	59.2	56.2	55.9	58.5	55.6	81.7	85.3	107.5	148.4	138.0	126.4	136.3
Louisiana	1,791.0	1,869.3	1,909.8	2,185.1	2,284.8	2,557.5	2,759.7	2,961.7	3,255.3	3,675.4	3,857.6	4,044.0	4,660.1
Michigan	69.7	69.4	66.5	78.7	64.1	57.4	60.7	59.6	58.9	55.3	49.5	45.0	55.3
Mississippi	303.7	365.4	402.9	385.7	385.4	358.8	350.1	412.3	387.7	368.2	359.6	378.7	389.3
Montana	114.7	118.9	112.4	111.3	108.4	156.2	209.0	272.4	298.9	331.4	320.0	337.8	309.3
Nebraska	0.9	0.9	1.6	9.7	15.9	21.8	25.6	38.0	57.7	62.9	63.1	69.2	80.6
New Mexico	530.5	552.2	592.2	592.0	611.6	733.4	814.9	805.9	819.7	835.4	831.7	894.1	1,025.8
New York	71.5	67.1	62.9	58.8	57.1	52.9	49.1	45.8	42.9	40.2	37.5	35.8	34.2
North Dakota	--	--	--	--	5.0	76.2	128.3	134.3	185.5	195.8	258.2	314.1	381.9
Ohio	29.0	28.5	27.7	27.3	26.4	27.4	31.8	36.8	56.0	63.6	68.2	70.8	74.1
Oklahoma	953.0	1,250.4	1,329.9	1,396.9	1,476.5	1,557.6	1,752.2	1,955.3	2,016.0	2,009.8	1,941.5	1,898.1	1,864.7
Pennsylvania	122.7	109.8	103.4	106.4	95.0	121.7	111.1	101.8	93.3	134.7	126.5	119.8	113.6
South Dakota	--	--	--	--	--	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	11,777.5	12,484.2	13,509.7	13,581.6	15,315.0	14,916.2	14,998.6	14,982.0	14,933.5	14,783.4	14,555.1	14,322.2	14,859.7
Utah	(1)	(1)	15.8	21.6	29.7	42.4	37.9	36.4	37.1	61.4	140.0	198.6	194.5
West Virginia	36.1	36.7	38.0	39.0	38.8	37.2	36.6	37.3	47.0	51.2	52.5	52.1	51.3
Wyoming	679.3	715.8	691.6	841.0	973.4	1,064.7	1,279.1	1,303.6	1,373.6	1,363.2	1,419.7	1,408.7	1,402.9
Miscellaneous	3.0	3.0	3.6	3.4	8.1	3.8	4.1	3.8	5.2	4.5	3.6	4.0	9.2
TOTAL U.S.(2)	21,487.7	23,380.4	24,649.5	25,268.4	27,468.0	27,960.6	28,914.8	29,560.7	30,012.2	30,434.6	30,300.4	30,535.9	31,719.3

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annual Reports.

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Alabama	33.3	35.9	37.5	45.1	49.9	66.4	85.3	78.8	72.7	67.1	65.3	61.5	56.7
Alaska	(1)	(1)	(1)	74.9	82.9	159.8	321.4	380.8	373.2	432.3	10,148.8	10,116.2	10,096.3
Arkansas	302.0	280.7	246.8	225.3	205.2	201.0	181.3	176.4	159.3	127.3	129.6	117.6	113.1
California	3,658.5	3,614.7	3,648.4	3,599.7	4,125.5	4,567.5	4,608.0	4,369.4	4,340.7	4,242.7	3,984.0	3,705.8	3,553.7
Colorado	363.9	419.7	388.3	368.4	346.3	327.2	343.5	339.9	420.5	400.6	389.0	332.8	326.4
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	74.8	204.1	208.1
Illinois	555.9	503.2	460.2	416.6	391.5	371.2	362.3	335.5	313.8	272.1	228.7	208.8	174.9
Indiana	66.3	62.0	61.0	63.4	60.6	57.6	47.9	47.2	40.2	41.3	37.0	30.9	29.4
Kansas	883.8	878.0	862.4	841.3	796.5	751.6	726.4	625.1	600.8	566.0	539.3	501.6	453.4
Kentucky	128.9	116.5	108.6	100.5	117.9	107.6	101.2	94.3	79.5	73.1	61.4	52.5	48.2
Louisiana	4,785.4	4,931.2	5,086.6	5,088.6	5,162.5	5,245.8	5,408.4	5,455.9	5,608.2	5,689.2	5,710.3	5,399.0	5,028.5
Michigan	77.8	78.8	75.0	68.5	58.3	52.8	70.7	62.5	55.3	51.5	45.6	58.8	62.0
Mississippi	407.1	401.2	388.4	384.9	356.7	359.8	374.1	356.7	325.6	360.2	354.7	342.4	312.5
Montana	266.7	250.9	248.9	271.3	251.6	274.1	281.6	308.0	345.1	275.8	241.5	228.2	241.2
Nebraska	86.2	100.4	93.8	83.6	71.1	70.7	57.1	63.2	55.3	46.8	40.9	36.1	30.6
New Mexico	1,083.7	1,090.2	1,064.6	1,010.7	956.8	895.2	1,024.6	925.8	864.5	839.9	760.9	656.9	582.6
New York	32.4	27.7	23.1	18.4	13.6	11.9	10.2	14.6	13.0	11.8	10.6	9.8	9.2
North Dakota	430.5	413.1	403.5	389.2	377.2	395.1	321.3	290.3	287.4	234.5	192.4	174.0	166.0
Ohio	74.7	75.8	77.3	87.8	99.6	100.9	101.2	114.2	132.3	127.4	127.9	129.1	127.4
Oklahoma	1,790.5	1,787.5	1,728.3	1,628.1	1,585.9	1,517.5	1,518.2	1,458.9	1,394.7	1,390.0	1,351.4	1,404.6	1,303.0
Pennsylvania	107.6	102.0	96.7	91.7	86.6	76.8	72.4	63.3	59.2	54.7	51.3	47.1	37.3
South Dakota	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	14,758.5	14,849.6	14,648.3	14,573.1	14,299.8	14,303.1	14,077.1	14,494.1	13,809.9	13,063.2	13,195.5	13,023.5	12,144.1
Utah	208.5	218.1	197.7	219.6	219.5	196.9	213.4	201.0	180.0	195.3	181.5	165.8	244.4
West Virginia	51.4	50.9	56.2	57.3	58.7	55.2	56.6	56.2	53.6	53.5	53.2	51.7	34.0
Wyoming	1,427.4	1,380.5	1,297.0	1,254.3	1,204.5	1,168.9	1,072.5	1,043.5	1,101.3	996.6	1,017.4	997.0	949.8
Miscellaneous	32.3	89.7	90.5	82.5	11.9	17.9	15.3	20.9	20.8	18.9	83.2	7.3	6.5
TOTAL U.S.(2)	31,613.2	31,758.5	31,389.2	30,970.0	30,990.5	31,352.4	31,452.1	31,376.7	30,707.1	29,631.9	39,001.3	38,063.0	36,339.4

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annual Reports.

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Alabama	53.6	68.7	61.0	53.3	85.0	74.0	45.0	54.0	55.0	54.0	51.0	68.0	69.0
Alaska	10,112.2	10,094.1	10,037.3	9,785.7	8,413.0	9,384.0	8,875.0	8,751.0	8,283.0	7,406.0	7,307.0	7,563.0	7,056.0
Arkansas	105.6	106.3	95.7	93.4	116.0	111.0	107.0	107.0	113.0	107.0	120.0	114.0	97.0
California	3,488.1	3,557.0	3,647.5	3,589.9	5,005.0	4,974.0	5,265.0	5,470.0	5,441.0	5,405.0	5,348.0	5,707.0	5,801.0
Colorado	304.8	289.3	276.1	251.8	230.0	194.0	159.0	183.0	147.0	169.0	186.0	198.0	198.0
Florida	183.9	302.7	262.0	249.6	213.0	168.0	128.0	134.0	109.0	97.0	78.0	82.0	77.0
Illinois	152.3	159.8	161.0	155.3	150.0	158.0	136.0	113.0	129.0	150.0	135.0	153.0	136.0
Indiana	26.6	24.4	22.0	22.3	20.0	29.0	40.0	23.0	23.0	28.0	34.0	33.0	35.0
Kansas	401.1	395.1	364.4	361.6	349.0	303.0	377.0	310.0	371.0	378.0	344.0	377.0	423.0
Kentucky	40.0	36.6	39.3	38.2	30.0	40.0	25.0	35.0	29.0	36.0	35.0	41.0	42.0
Louisiana	4,576.8	4,226.5	3,827.2	3,470.6	3,600.0	3,448.0	2,780.0	2,751.0	2,985.0	2,728.0	2,707.0	2,661.0	2,642.0
Michigan	72.4	82.3	93.3	138.8	233.0	220.0	159.0	205.0	240.0	184.0	209.0	180.0	191.0
Mississippi	291.0	261.4	231.2	214.2	241.0	250.0	238.0	202.0	209.0	223.0	205.0	201.0	184.0
Montana	219.3	207.4	164.0	152.7	175.0	158.0	152.0	179.0	186.0	216.0	234.0	224.0	232.0
Nebraska	28.2	26.8	28.4	31.3	22.0	30.0	25.0	46.0	41.0	32.0	44.0	46.0	42.0
New Mexico	643.0	625.0	588.1	535.5	605.0	579.0	563.0	547.0	555.0	563.0	576.0	660.0	688.0
New York	8.3	10.9	10.0	9.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Dakota	179.5	172.8	158.2	149.6	155.0	162.0	211.0	214.0	223.0	237.0	258.0	260.0	255.0
Ohio	124.9	123.9	121.3	125.3	74.0	69.0	82.0	116.0	112.0	111.0	130.0	116.0	79.0
Oklahoma	1,271.0	1,232.4	1,239.7	1,186.6	1,109.0	979.0	1,014.0	930.0	950.0	971.0	931.0	940.0	935.0
Pennsylvania	39.6	50.4	48.0	50.6	57.0	27.0	33.0	35.0	32.0	37.0	41.0	40.0	38.0
South Dakota	(1)	(1)	1.9	1.5	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	1.5	1.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	11,756.6	11,001.5	10,080.0	9,226.3	9,751.0	8,911.0	8,248.0	8,206.0	8,093.0	7,616.0	7,539.0	7,557.0	7,894.0
Utah	264.5	250.6	208.3	183.2	252.0	188.0	201.0	198.0	190.0	173.0	187.0	172.0	276.0
West Virginia	32.1	32.2	31.4	30.0	21.0	30.0	48.0	30.0	30.0	48.0	49.0	76.0	40.0
Wyoming	916.8	903.4	877.4	827.8	851.0	845.0	841.0	928.0	840.0	856.0	957.0	954.0	951.0
Miscellaneous	7.6	8.5	5.4	6.2	23.0	24.0	22.0	38.0	40.0	33.0	30.0	23.0	35.0
TOTAL U.S.(2)	35,299.8	34,250.0	32,682.1	30,942.2	31,780.0	31,355.0	29,810.0	29,805.0	29,426.0	27,858.0	27,735.0	28,446.0	28,416.0

(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Sources: 1947-1976: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annuals.
1977-1985: DOE/EIA--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

Section II
Table 3c

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1986	1987
Alabama	55.0	55.0
Alaska	6,875.0	7,378.0
Arkansas	88.0	82.0
California	4,734.0	4,709.0
Colorado	207.0	292.0
Florida	67.0	61.0
Illinois	135.0	153.0
Indiana	32.0	23.0
Kansas	312.0	357.0
Kentucky	31.0	25.0
Louisiana	826.0	807.0
Michigan	146.0	151.0
Mississippi	199.0	202.0
Montana	248.0	246.0
Nebraska	45.0	33.0
New Mexico	644.0	654.0
New York	(1)	(1)
North Dakota	218.0	215.0
Ohio	72.0	66.0
Oklahoma	874.0	788.0
Pennsylvania	26.0	26.0
South Dakota	(1)	(1)
Tennessee	(1)	(1)
Texas	7,152.0	7,112.0
Utah	269.0	284.0
West Virginia	37.0	34.0
Wyoming	849.0	854.0
Miscellaneous	33.0	30.0
TOTAL U.S.(2)	26,889.0(3)	27,256.0(3)

(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.
(3) 1986 includes 2,715 from federal offshore waters, 1987 = 2,639.

Source: D.O.E./E.I.A.--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

ESTIMATED PROVED WORLD RESERVES OF CRUDE OIL
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1975	Nation	1976	Nation	1977
1. Saudi Arabia(1)	164,500,000	1. Saudi Arabia(1)	148,600,000	1. Saudi Arabia(1)	151,400,000
2. U.S.S.R.	83,400,000	2. U.S.S.R.	80,400,000	2. U.S.S.R.	78,100,000
3. Kuwait(1)	72,800,000	3. Kuwait(1)	68,000,000	3. Kuwait(1)	67,400,000
4. Iran	66,000,000	4. Iran	64,500,000	4. Iran	63,000,000
5. Iraq	35,000,000	5. Iraq	34,300,000	5. Iraq	34,000,000
6. United States	34,249,956	6. United States	32,682,127	6. United Arab Emirates	31,200,000
7. United Arab Emirates	33,920,000	7. United Arab Emirates	32,200,000	7. United States	30,942,166
8. Libya	26,600,000	8. Libya	26,100,000	8. Libya	25,500,000
9. People's Republic of China	25,000,000	9. Nigeria	20,200,000	9. People's Republic of China	20,000,000
10. Nigeria	20,900,000	10. People's Republic of China	20,000,000	10. Nigeria	19,500,000
11. United Kingdom	15,700,000	11. Venezuela	17,700,000	11. United Kingdom	16,800,000
12. Venezuela	15,000,000	12. United Kingdom	16,000,000	12. Venezuela	15,270,000
13. Indonesia	15,000,000	13. Indonesia	14,000,000	13. Indonesia	10,500,000
14. Mexico	13,582,000	14. Mexico	9,500,000	14. Mexico	7,000,000
15. Algeria	7,700,000	15. Algeria	7,370,000	15. Algeria	6,800,000
16. Norway	7,300,000	16. Norway	7,000,000	16. Canada	6,257,082
17. Canada	7,171,229	17. Canada	6,653,002	17. Oman	5,800,000
18. Oman	6,000,000	18. Oman	5,900,000	18. Qatar	5,700,000
19. Qatar	6,000,000	19. Qatar	5,850,000	19. Norway	5,660,000
20. Congo Republic	4,874,000	20. Egypt	3,900,000	20. India	3,000,000
TOTAL FREE WORLD	601,018,535	TOTAL FREE WORLD	554,920,849	TOTAL FREE WORLD	538,989,568
TOTAL WORLD	712,418,535	TOTAL WORLD	657,920,849	TOTAL WORLD	640,089,568

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 17.3 billion barrels in 1975, 6.4 billion barrels in 1976, and 6.3 billion barrels in 1977. This production is not included in the above figures.

Source: United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
Canada, Canadian Petroleum Association
Other Nations, Oil and Gas Journal, Worldwide Report

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES-TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1978	Nation	1979	Nation	1980
1. Saudi Arabia(1)	150,000,000	1. Saudi Arabia(1)	165,700,000	1. Saudi Arabia(1)	163,350,000
2. U.S.S.R.	75,000,000	2. U.S.S.R.	71,000,000	2. U.S.S.R.	67,000,000
3. Kuwait(1)	67,000,000	3. Kuwait(1)	66,200,000	3. Kuwait(1)	65,400,000
4. Iran	62,000,000	4. Iran	59,000,000	4. Iran	58,000,000
5. Iraq	34,500,000	5. Iraq	32,100,000	5. Mexico	31,250,000
6. United Arab Emirates	32,425,000	6. Abu Dhabi	30,000,000	6. Iraq	31,000,000
7. United States	29,486,402	7. United States	27,803,760	7. Abu Dhabi	28,000,000
8. Libya	25,000,000	8. Libya	24,300,000	8. United States	27,051,289
9. People's Republic of China	20,000,000	9. People's Republic of China	20,000,000	9. Libya	23,500,000
10. United Kingdom	19,000,000	10. Nigeria	18,200,000	10. People's Republic of China	20,000,000
11. Nigeria	18,700,000	11. Venezuela	18,000,000	11. Venezuela	17,870,000
12. Venezuela	18,200,000	12. Mexico	16,000,000	12. Nigeria	17,400,000
13. Mexico	14,000,000	13. United Kingdom	16,000,000	13. United Kingdom	15,400,000
14. Indonesia	10,000,000	14. Indonesia	10,200,000	14. Indonesia	9,600,000
15. Algeria	6,600,000	15. Canada	6,860,000	15. Algeria	8,440,000
16. Norway	6,000,000	16. Algeria	6,300,000	16. Canada	6,800,000
17. Canada	5,970,872	17. Norway	5,900,000	17. Norway	5,750,000
18. Oman	5,650,000	18. Qatar	4,000,000	18. Qatar	3,760,000
19. Qatar	5,600,000	19. Egypt	3,200,000	19. Egypt	3,100,000
20. India	3,000,000	20. India	2,900,000	20. Malaysia	2,800,000
TOTAL FREE WORLD	547,805,194	TOTAL FREE WORLD	547,771,585	TOTAL FREE WORLD	552,174,789
TOTAL WORLD	645,805,194	TOTAL WORLD	641,771,585	TOTAL WORLD	642,174,789

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 6.2 billion barrels in 1978, 6.5 billion barrels in 1979, and 6.3 billion barrels in 1980. These figures are not included in the above figures.

Source: United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
Canada, Canadian Petroleum Association
Other Nations, Oil and Gas Journal, Worldwide Report

Section II
Table 4b

(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1981	Nation	1982	Nation	1983
1. Saudi Arabia(1)	165,000,000	1. Saudi Arabia(1)	164,600,000	1. Saudi Arabia(1)	162,400,000
2. Kuwait(1)	64,900,000	3. Kuwait(1)	64,480,000	3. Kuwait(1)	64,230,000
3. U.S.S.R.	63,000,000	2. U.S.S.R.	63,000,000	2. U.S.S.R.	63,000,000
4. Iran	57,500,000	4. Iran	57,000,000	4. Iran	55,308,000
5. Mexico	44,000,000	5. Mexico	56,990,000	5. Mexico	48,300,000
6. Iraq	30,000,000	6. Abu Dhabi	30,600,000	6. Iraq	41,000,000
7. Abu Dhabi	29,000,000	7. United States	29,426,000	7. Abu Dhabi	30,510,000
8. United States	29,805,000	8. Iraq	29,700,000	8. United States	27,858,000
9. Libya	23,000,000	9. Libya	22,600,000	9. Libya	21,500,000
10. China	20,500,000	10. Venezuela	20,300,000	10. Venezuela	21,500,000
11. Venezuela	17,950,000	11. China	19,895,000	11. China	19,485,000
12. Nigeria	16,700,000	12. Nigeria	16,500,000	12. Nigeria	16,750,000
13. United Kingdom	14,800,000	13. United Kingdom	14,800,000	13. United Kingdom	13,900,000
14. Indonesia	9,500,000	14. Indonesia	9,800,000	14. Indonesia	9,550,000
15. Algeria	8,200,000	15. Algeria	8,080,000	15. Algeria	9,440,000
16. Canada	6,400,000	16. Norway	7,620,000	16. Canada	7,020,000
17. Norway	5,500,000	17. Canada	7,300,000	17. Norway	6,800,000
18. Qatar	3,585,000	18. Qatar	3,434,000	18. Qatar	3,425,000
19. Malaysia	3,000,000	19. Egypt	2,930,000	19. Malaysia	3,325,000
20. Egypt(2)	2,900,000	20. Malaysia	2,800,000	20. Egypt	3,325,000
TOTAL FREE WORLD	565,629,712	TOTAL FREE WORLD	585,505,150	TOTAL FREE WORLD	583,147,406
TOTAL WORLD	651,929,712	TOTAL WORLD	670,350,150	TOTAL WORLD	668,262,406

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 6,260 mb in 1981, 6,500 mb in 1982, and 5,840 mb in 1983. This production is not included in the above figures.

Source: United States, U.S. Energy Information Administration
Rest of World, Oil and Gas Journal

Section II
Table 4c

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES-TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

	Nation	1984		Nation	1985		Nation	1986
1.	Saudi Arabia(1)	166,000,000	1.	Saudi Arabia(1)	169,000,000	1.	Saudi Arabia(1)	168,800,000
2.	Kuwait(1)	63,900,000	2.	Kuwait(1)	90,000,000	2.	Kuwait(1)	89,774,000
3.	U.S.S.R.	63,000,000	3.	U.S.S.R.	63,000,000	3.	U.S.S.R.	61,000,000
4.	Iran	51,000,000	4.	Mexico	48,600,000	4.	Mexico	49,300,000
5.	Mexico	48,000,000	5.	Iran	48,500,000	5.	Iran	47,876,000
6.	Iraq	43,000,000	6.	Iraq	44,500,000	6.	Iraq	44,110,000
7.	Abu Dhabi	30,400,000	7.	Abu Dhabi	30,500,000	7.	Abu Dhabi	31,000,000
8.	United States	27,735,000	8.	United States	28,446,000	8.	United States	28,416,000
9.	Venezuela	24,850,000	9.	Venezuela	25,845,000	9.	Venezuela	25,591,000
10.	Libya	21,270,000	10.	Libya	21,100,000	10.	Libya	21,300,000
11.	China	19,100,000	11.	China	19,100,000	11.	China	18,420,000
12.	Nigeria	16,550,000	12.	Nigeria	16,650,000	12.	Nigeria	16,600,000
13.	United Kingdom	13,150,000	13.	United Kingdom	13,590,000	13.	United Kingdom	13,000,000
14.	Algeria	9,220,000	14.	Algeria	9,000,000	14.	Norway	10,900,000
15.	Indonesia	9,100,000	15.	Indonesia	8,650,000	15.	Algeria	8,820,000
16.	Norway	7,660,000	16.	Norway	8,300,000	16.	Indonesia	8,500,000
17.	Canada	6,730,000	17.	Canada	7,075,000	17.	Canada	6,500,000
18.	India	3,485,000	18.	Oman	3,500,000	18.	Oman	4,000,000
19.	Egypt	3,450,000	19.	India	3,500,000	19.	Egypt	3,850,000
20.	Qatar	3,330,000	20.	Qatar	3,350,000	20.	India	3,736,000
	TOTAL FREE WORLD	585,137,600		TOTAL FREE WORLD	615,713,400		TOTAL FREE WORLD	619,196,560
	TOTAL WORLD	669,737,600		TOTAL WORLD	699,813,400		TOTAL WORLD	700,566,560

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 5,695 MB in 1984, 5,420 MB in 1985, and 5,380 in 1986. These data are not included in the above figures.

Source: United States--U.S. Energy Information Administration, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual Report
Rest of World--Oil and Gas Journal, "Worldwide Report" issue

Section II
Table 4d

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES--TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of Barrels)

	Nation	1987
1.	Saudi Arabia	166,573,900
2.	Kuwait	91,916,000
3.	U.S.S.R.	59,000,000
4.	Mexico	54,653,000
5.	Iran	48,800,000
6.	Iraq	47,100,000
7.	Abu Dhabi	31,000,000
8.	United States	26,889,000
9.	Venezuela	25,000,000
10.	Libya	21,300,000
11.	China	18,400,000
12.	Nigeria	16,000,000
13.	Norway	10,500,000
14.	United Kingdom	9,000,000
15.	Algeria	8,800,000
16.	Indonesia	8,300,000
17.	Canada	6,850,000
18.	India	4,202,000
19.	Oman	4,032,000
20.	Egypt	3,600,000
	TOTAL FREE WORLD	620,528,600
	TOTAL WORLD	699,778,600

	Nation	1988
1.	Saudi Arabia	166,980,000
2.	Iraq	100,000,000
3.	Iran	92,850,000
4.	Abu Dhabi	92,205,000
5.	Kuwait	91,920,000
6.	U.S.S.R.	59,000,000
7.	Venezuela	56,300,000
8.	Mexico	48,610,000
9.	United States	27,256,000
10.	Libya	21,000,000
11.	China	18,400,000
12.	Nigeria	15,980,000
13.	Norway	14,800,000
14.	Algeria	8,500,000
15.	Indonesia	8,400,000
16.	Canada	6,825,000
17.	United Kingdom	5,200,000
18.	Egypt	4,300,000
19.	India	4,250,000
20.	Oman	4,012,000
	TOTAL FREE WORLD	810,144,500
	TOTAL WORLD	889,344,500

Source: U.S.--D.O.E./E.I.A., U.S. Crude Oil, Natural Gas Liquids and Natural Gas Reserves.
Rest of World--Oil and Gas Journal, "Worldwide Report" issue.

Section II
Table 5

USGS ESTIMATES OF U.S. OIL AND GAS RESOURCES

	CRUDE OIL (billion barrels)							NATURAL GAS (trillion cubic feet)					
	Identified resources			Undiscovered recoverable resources				Identified resources		Undiscovered recoverable resources			
Petroleum Region	Measured reserves	Indicated reserves	Inferred reserves	Low 1F95	High 1F5	Mean	Standard deviation	Measured reserves	Inferred reserves	Low(3) 1F95	High 1F5	Mean	Standard deviation
Onshore													
1. Alaska	8.7	0	5.0	2.5	14.6	6.9	4.3	30.0	4.4	19.8	62.3	36.6	14.0
2. Pacific Coast	3.2	1.6	1.2	2.1	7.9	4.4	2.0	4.2	3.8	8.2	24.9	14.7	5.5
3. Colorado Plateau an Basin and Range	0.3	Negl.	1.0	6.9	25.9	14.2	8.0	11.4	4.5	53.5	142.4	90.1	29.7
4. Rocky Mountains and northern Great Plas	1.1	0.2	2.9	6.0	14.0	9.4	2.6	7.1	5.5	29.6	69.0	45.7	12.6
5. West Texas and eastern New Mexico	5.4	1.3	4.0	2.7	9.4	5.4	2.2	15.9	18.1	22.4	75.2	42.8	17.8
6. Gulf Coast	3.8	0.2	5.3	3.6	12.6	7.1	2.8	45.3	74.3	56.5	249.1	124.4	63.6
7. Mid-continent	1.5	0.2	1.4	2.3	7.7	4.4	1.8	32.0	18.8	22.9	80.8	44.5	18.4
8. Michigan Basin	0.2	Negl.	0.8	0.3	2.7	1.1	0.8	1.1	1.1	1.8	10.9	5.1	3.1
9. Eastern Interior	0.2	Negl.	0.1	0.3	1.9	0.9	0.6	Negl.	0.1	1.2	5.0	2.7	1.3
10. Appalachians	0.2	Negl.	0.1	0.1	1.5	0.6	0.5	6.2	5.9	6.4	45.8	20.1	13.2
11. Atlantic Coast	Negl.	0	0.1	0.1	0.8	0.3	0.3	Negl.	Negl.	Negl.	0.4	0.1	0.3
Entire onshore	24.7	3.6	21.8	41.7	71.0	54.6	10.5	153.3	136.5	322.5	567.9	426.8	78.5
Offshore-Shelf													
1A Alaska2	0.2	0	0.1	3.8	22.0	10.8	6.4	2.0	1.2	28.5	99.0	57.4	23.6
2A Pacific Coast	1.2	0	0.5	0.6	3.0	1.5	0.8	1.9	0.4	0.9	5.2	2.5	1.5
6A Gulf of Mexico	1.7	Negl.	1.0	1.3	7.9	4.0	2.1	34.4	39.5	22.0	79.2	45.3	18.5
11A Atlantic Coast	0	0	0	0	3.9	1.3	1.4	0	0	2.2	17.9	8.2	5.0
Entire shelf	3.1	Negl.	1.5	9.2	30.2	17.6	6.9	38.2	41.0	72.0	166.8	113.4	30.4
Offshore-Slope													
1A Alaska2	0	0	0	0	52.0	1.4	2.3	0	0	0	20.2	7.2	12.3
2A Pacific Coast	0	0	0	0.6	6.0	2.4	2.0	0	0	1.9	10.2	4.4	3.0
6A Gulf of Mexico	No data	0	No data	0.9	5.2	2.5	1.4	No data	No data	11.1	51.8	26.5	13.8
11A Atlantic Coast	0	0	0	0	10.7	4.1	3.6	0	0	5.1	34.5	15.4	9.6
Entire slope	0	0	0	4.2	19.2	10.4	4.9	0	0	28.6	87.1	53.6	21.0
Offshore-combined shelf and slope													
1A Alaska2	0.2	0	0.1	4.6	24.2	12.2	6.8	2.0	1.2	33.3	109.6	64.6	26.6
2A Pacific Coast	1.2	0	0.5	1.7	7.9	3.8	2.2	1.9	0.4	3.7	13.6	6.9	3.3
6A Gulf of Mexico	1.7	Negl.	1.0	3.1	11.1	6.5	2.5	34.4	39.5	41.7	114.2	71.8	23.1
11A Atlantic Coast	0	0	0	1.1	12.9	5.4	3.9	0	0	9.2	42.8	23.7	10.8
Entire slope	3.1	Negl.	1.5	16.9	43.5	28.0	8.5	38.2	41.0	117.4	230.6	167.0	37.0
Combined onshore and offshore													
Entire United States	27.8	3.6	23.4	64.3	105.1	82.6	13.4	191.5	177.5	474.6	739.3	593.8	86.8

(1) F95 denotes the 95th fractile; the probability of more than the amount F95 is 95% F5 is defined similarly.

(2) Includes quantities considered recoverable only if technology permits their ploitation beneath Artic pack ice--a condition not yet met.

(3) Does not include gas in storage.

Source: U.S. Geological Survey, Circular 860

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Section III
Table 1

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1947	275	1,434,351	119	662,513	3,086	12,509,723	3,480	14,606,587	11.3
1948	366	1,791,437	135	899,514	3,795	16,048,313	4,296	18,739,264	11.7
1949	364	1,813,650	142	973,124	3,943	15,372,983	4,449	18,159,757	11.4
1950	462	2,345,714	130	800,276	4,698	18,972,164	5,290	22,118,254	11.2
1951	515	2,784,458	169	1,046,805	5,505	24,116,951	6,189	27,948,214	11.1
1952	556	3,122,962	185	1,310,227	5,957	28,068,745	6,698	32,501,934	11.1
1953	581	3,288,855	193	1,244,946	6,151	29,321,262	6,925	33,855,063	11.2
1954	639	3,577,418	263	1,761,483	6,478	30,149,120	7,380	35,488,021	12.2
1955	659	3,667,073	260	1,664,789	7,186	33,654,112	8,105	38,985,974	11.3
1956	628	3,690,270	240	1,762,688	7,874	36,913,273	8,742	42,366,231	9.9
1957	590	3,403,283	282	2,099,922	7,142	33,600,397	8,014	39,103,602	10.9
1958	518	2,963,228	268	2,077,923	6,164	29,161,083	6,950	34,202,226	11.3
1959	466	2,710,157	306	2,113,934	6,259	30,635,114	7,031	35,459,205	11.0
1960	448	2,614,001	297	2,136,721	6,575	31,130,339	7,320	35,881,061	10.2

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1947	982	4,280,672	396	1,895,491	5,397	20,217,185	6,775	26,393,348	20.3
1948	1,098	4,883,179	365	2,306,271	6,550	25,561,647	8,013	32,751,097	18.3
1949	1,406	5,950,460	424	2,409,230	7,228	26,438,601	9,058	34,798,291	20.2
1950	1,583	6,861,758	431	2,356,021	8,292	30,957,394	10,306	40,175,173	19.5
1951	1,763	8,125,473	454	2,495,592	9,539	38,722,629	11,756	49,343,694	18.9
1952	1,776	8,490,701	559	3,393,813	10,090	43,730,875	12,425	55,615,389	18.8
1953	1,981	9,431,700	699	3,952,118	10,633	47,279,793	13,313	60,663,611	20.1
1954	1,985	9,409,404	726	4,399,196	10,389	45,791,944	13,100	59,600,544	20.7
1955	2,236	10,774,397	874	5,212,258	11,832	53,219,667	14,942	69,206,322	20.8
1956	2,267	11,110,534	822	5,179,111	13,118	58,047,439	16,207	74,337,084	19.1
1957	1,945	9,794,182	865	5,966,961	11,904	53,420,086	14,714	69,181,229	19.1
1958	1,745	8,712,007	822	5,472,151	10,632	47,299,753	13,199	61,483,911	19.4
1959	1,702	8,544,972	912	6,031,180	10,577	48,676,369	13,191	63,252,521	19.8
1960	1,321	6,829,122	868	5,466,439	9,515	43,535,075	11,704	55,830,636	18.7

Source: American Association of Petroleum Geologists.

Section III
Table 1a

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1961	429	2,304,472	316	2,373,465	6,164	30,733,007	6,909	35,410,944	10.8
1962	470	2,670,875	317	2,380,930	6,007	29,832,533	6,794	34,884,338	11.6
1963	529	2,629,952	240	1,550,207	5,801	29,371,086	6,570	33,551,245	11.7
1964	440	2,623,873	252	1,933,484	5,931	30,028,416	6,623	34,585,773	10.4
1965	397	2,279,545	234	1,849,272	5,544	27,933,474	6,175	32,062,291	10.2
1966	403	2,437,921	232	1,888,322	5,523	27,052,375	6,158	31,378,618	10.3
1967	371	2,255,638	189	1,496,083	4,700	24,255,198	5,260	28,006,919	10.6
1968	321	2,012,067	127	1,046,358	4,757	27,190,387	5,205	30,248,812	8.6
1969	344	2,237,551	191	1,669,263	5,421	31,511,973	5,956	35,418,787	9.0
1970(1)	292	1,952,666	189	1,607,386	4,348	25,412,904	4,829	28,972,956	10.0
1971	246	1,616,540	229	1,716,792	4,161	24,366,037	4,636	27,699,369	10.2
1972	287	1,861,279	270	2,056,516	4,454	26,780,915	5,011	30,698,710	11.1
1973	299	1,874,576	451	3,111,795	4,346	25,631,606	5,096	30,617,977	14.7
1974	396	2,447,814	466	3,172,478	5,084	29,289,318	5,946	34,909,610	17.0
1975	437	2,918,538	486	3,593,502	5,315	31,198,873	6,234	37,710,913	14.8

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1961	1,157	5,899,555	813	5,249,616	9,022	38,054,853	10,992	49,204,024	17.9
1962	1,211	6,205,402	771	5,187,452	8,815	44,103,834	10,797	55,496,688	18.4
1963	1,314	6,409,095	664	4,229,802	8,686	42,846,565	10,664	53,485,462	18.5
1964	1,219	6,715,355	577	4,203,534	8,951	42,655,665	10,747	53,574,554	16.7
1965	946	5,365,758	515	3,757,004	8,005	45,319,365	9,466	54,442,127	15.4
1966	1,030	5,880,029	578	4,881,198	8,705	44,461,934	10,313	55,223,161	15.6
1967	986	5,677,675	532	3,978,526	7,360	38,182,439	8,878	47,838,640	17.1
1968	954	5,642,235	486	3,740,781	7,439	41,575,022	8,879	50,958,038	16.2
1969	1,084	6,563,032	616	4,984,622	8,001	45,918,308	9,701	57,465,962	17.5
1970(1)	763	4,729,423	478	3,666,020	6,195	35,135,039	7,436	43,530,482	16.7
1971	664	3,785,858	472	3,612,832	5,995	34,563,763	7,131	41,962,453	15.9
1972	690	4,042,124	659	4,872,314	6,202	36,364,835	7,551	45,279,273	17.9
1973	654	4,046,218	1,079	7,074,241	6,038	34,928,875	7,771	46,049,334	22.3
1974	870	5,068,782	1,205	7,741,846	6,894	38,861,593	8,969	51,672,221	23.1
1975	991	5,822,068	1,261	8,468,203	7,207	40,755,363	9,459	55,045,634	23.8

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(1) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed regardless of the time frame in which they were reported to API.

Source: 1961-1966 -- American Association of Petroleum Geologists.
1967-1975 -- American Petroleum Institute.

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1976	458	3,013,230	527	3,786,300	4,871	28,898,393	5,856	35,697,923	16.8
1977	458	2,839,680	534	3,868,753	5,170	30,636,898	6,162	37,345,331	16.1
1978	484	3,164,038	644	4,297,038	5,603	34,550,903	6,731	42,011,979	16.8
1979	532	3,468,220	688	4,947,501	5,203	31,941,489	6,423	40,357,210	19.0
1980	664	4,310,733	695	4,764,991	5,973	36,802,580	7,332	45,878,304	18.5
1981	868	6,030,600	720	5,593,603	7,563	47,904,317	9,151	59,528,520	17.4
1982	707	4,613,633	618	4,575,677	6,061	37,840,415	7,386	47,029,725	17.9
1983	508	3,169,330	486	3,101,355	5,063	29,167,196	6,057	35,437,881	16.4
1984	554	3,806,830	429	2,877,818	5,545	34,525,367	6,528	41,210,015	15.1
1985	414	2,890,672	358	2,618,903	4,858	31,087,959	5,630	36,597,534	13.7
1986	262	1,698,964	215	1,423,501	2,939	18,247,062	3,416	21,369,527	14.0
1987	223	1,407,945	174	1,127,990	2,542	14,833,481	2,939	17,369,416	13.5

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1976	1,100	6,493,760	1,361	9,187,178	6,856	38,211,252	9,317	53,892,190	26.4
1977	1,181	6,870,706	1,557	10,204,224	7,402	41,136,466	10,140	58,211,396	27.0
1978	1,189	7,098,457	1,786	11,780,690	8,055	46,616,063	11,030	65,495,210	27.0
1979	1,335	7,991,579	1,921	12,634,380	7,479	42,736,704	10,735	63,362,663	30.3
1980	1,777	10,109,549	2,085	13,710,438	9,008	49,992,439	12,870	73,812,426	30.0
1981	2,661	15,418,060	2,522	16,996,454	12,247	68,653,990	17,430	101,068,504	29.7
1982(1)	2,481	13,415,348	2,172	14,713,785	11,229	60,301,560	15,882	88,430,693	29.3
1983	2,129	10,544,047	1,654	10,235,772	10,062	48,472,448	13,845	69,252,267	27.3
1984	2,334	12,621,000	1,588	9,943,000	11,216	58,759,000	15,138	81,323,000	25.9
1985	1,724	10,068,000	1,283	8,694,000	9,201	49,571,000	12,208	68,333,000	24.6
1986	980	5,857,000	743	5,027,000	5,469	29,759,000	7,192	40,643,000	24.0
1987	899	5,266,000	742	4,829,000	5,249	27,098,000	6,890	37,193,000	23.8

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(1) Data beginning with 1982 are for estimated completions rather than reported completions. Therefore, these figures do not correspond to those on Table 15d (state data), which represent reported completions.

Source: American Petroleum Institute.
1982-1983: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1985.
1984: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1986.
1985-1987: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1987.

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells(1)

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total	Footage
1947	17,017		2,909		4,141		24,067	87,667,652
1948	21,487		2,532		5,476		29,495	104,640,903
1949	20,636		2,463		5,499		28,598	103,204,709
1950	22,847		2,412		6,465		31,724	119,112,827
1951	21,690		2,576		7,114		31,380	122,987,306
1952	21,690		2,696		7,528		31,914	131,574,611
1953	23,781		3,107		7,816		34,704	138,175,389
1954	27,788		3,251		8,779		39,818	159,385,456
1955	29,331		2,739		8,910		40,980	157,063,678
1956	28,463		3,721		8,720		40,904	161,564,916
1957	26,067		3,755		9,079		38,901	152,719,310
1958	22,833		3,981		8,411		35,225	136,740,181
1959	24,098		4,117		8,688		36,903	145,978,895
1960	19,865		4,390		8,059		32,314	134,872,036

Total Wells

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total Wells	Footage	Service Strat & Core	Grand Total
1947	17,999		3,305		9,538		30,842	114,061,000	2,280	33,122
1948	22,585		2,897		12,026		37,508	137,392,000	2,270	39,778
1949	22,042		2,887		12,727		37,656	138,003,000	1,382	39,038
1950	24,430		2,843		14,757		42,030	159,288,000	1,249	43,279
1951	23,453		3,030		16,653		43,136	172,331,000	1,380	44,516
1952	23,466		3,255		17,618		44,339	187,190,000	1,482	45,821
1953	25,762		3,806		18,449		48,017	198,839,000	1,262	49,279
1954	29,773		3,974		19,168		52,915	218,986,000	1,012	53,927
1955	31,567		3,608		20,742		55,917	226,270,000	760	56,677
1956	30,737		4,543		21,797		57,077	233,902,000	1,049	58,126
1957	28,012		4,620		20,976		53,608	221,900,539	1,061	53,838
1958	24,578		4,803		19,043		48,424	198,224,092	1,615	50,039
1959	25,800		5,029		19,265		50,094	209,231,416	1,670	51,764
1960	21,186		5,258		17,574		44,018	190,702,672	2,733	46,751

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(1) The number of development wells was obtained by deducting the total number of exploratory wells reported by the AAPG from the total number of wells reported by the Oil and Gas Journal.

(2) Footage not available prior to 1966.

Source: American Association of Petroleum Geologists and Oil and Gas Journal.

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells(1)

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total	Footage
1961	19,944		4,851		8,084		32,879	142,912,090
1962	20,038		5,077		7,867		32,982	143,061,953
1963	18,974		4,087		7,661		30,722	130,871,538
1964	19,401		4,278		8,537		32,216	136,347,316
1965	17,815		4,209		8,020		30,044	126,984,888
1966	15,417	59,562,661	3,589	19,562,196	7,065	28,097,191	26,071	107,222,048
1967	14,343	52,955,743	3,127	17,601,654	5,886	22,960,426	23,356	93,517,823
1968	13,377	53,874,620	2,970	16,975,492	5,373	23,162,297	21,720	94,012,409
1969	13,284	55,018,970	3,467	19,177,390	5,735	25,445,537	22,486	99,641,897
1970(3)	12,280	52,101,320	3,353	19,950,845	4,904	22,976,880	2[illegible],737	95,029,045
1971	11,239	45,271,862	3,511	19,807,020	4,387	20,214,617	19,137	85,293,499
1972	10,747	45,441,840	4,825	25,384,401	4,811	22,691,046	20,383	93,517,289
1973	9,597	40,712,974	5,896	31,137,367	4,428	21,525,063	19,921	93,375,404
1974	12,794	47,001,530	5,963	30,739,691	5,311	24,362,957	24,068	102,104,178
1975	15,988	61,103,799	6,908	36,012,511	6,529	28,878,049	29,425	125,994,359

Total Wells

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total Wells	Footage	Service Strat & Core	Grand Total
1961	21,101		5,664		17,106		43,871	192,116,114	3,091	46,962
1962	21,249		5,848		16,682		43,779	198,558,641	2,400	46,179
1963	20,288		4,751		16,347		41,386	184,357,000	2,267	43,653
1964	20,620		4,855		17,488		42,963	189,921,870	2,273	45,236
1965	18,761		4,724		16,025		39,501	181,427,015	1,922	41,423
1966	16,447	65,442,690	4,167	24,443,394	15,770	72,559,125	36,384	162,445,209	2,152	38,536
1967	15,329	58,633,418	3,659	21,580,180	13,246	61,142,865	32,234	141,356,463	1,584	33,818
1968	14,331	59,516,855	3,456	20,716,273	12,812	64,737,319	30,599	144,970,447	2,315	32,914
1969	14,368	61,582,002	4,083	24,162,012	13,736	71,363,845	32,187	157,107,859	1,866	34,053
1970(3)	13,043	56,830,743	4,031	23,616,865	11,099	58,111,919	28,173	138,559,527	1,369	29,542
1971	11,903	49,057,720	3,983	23,419,852	10,382	54,778,380	26,268	127,255,952	1,594	27,682
1972	11,437	49,483,964	5,484	30,256,715	11,013	59,055,883	27,934	138,796,562	1,486	29,420
1973	10,251	44,751,192	6,975	38,211,608	10,466	56,453,938	27,692	139,424,738	970	28,662
1974	13,664	52,070,312	7,168	38,481,537	12,205	63,224,550	33,037	153,776,399	1,378	34,415
1975	16,979	66,925,867	8,169	44,480,714	13,736	69,633,412	38,884	181,039,993	1,920	40,804

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(1) The number of development wells for 1961-1965 was obtained by deducting the total number of exploratory wells reported by the AAPG from the total number of wells reported by the Oil and Gas Journal.

(2) Footage not available prior to 1966.

(3) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed regardless of the time frame in which they were reported to API.

Source: 1961-1965 -- American Association of Petroleum Geologists and Oil and Gas Journal.
1966-1975 -- American Petroleum Institute.

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage
1976	16,597	62,333,936	8,077	40,010,511	6,949	31,052,949	31,623	133,397,396
1977	17,519	68,320,374	10,562	53,295,651	7,634	35,868,457	35,715	157,484,482
1978	17,876	69,522,882	12,619	63,809,274	8,536	39,558,882	39,031	172,891,038
1979	19,354	74,150,995	13,245	67,240,506	8,556	38,931,266	41,155	180,322,767
1980	30,343	113,154,164	15,047	76,641,633	11,226	47,836,614	56,616	237,632,411
1981	39,859	153,287,896	17,220	88,782,627	14,725	63,381,426	71,804	305,451,949
1982	36,771	134,817,629	16,638	90,474,536	14,598	61,660,061	68,007	286,952,226
1983	35,267	125,726,889	12,851	66,429,973	13,775	55,208,335	61,893	247,365,197
1984	42,138	155,025,000	13,374	71,706,000	14,333	60,742,000	69,845	287,473,000
1985	34,734	132,253,000	11,634	62,200,000	12,230	53,992,000	58,598	248,445,000
1986	17,557	68,431,000	7,175	37,272,000	6,962	30,117,000	31,678	135,820,000
1987	14,888	57,675,000	7,106	35,782,000	6,043	26,894,000	28,037	120,351,000

Total Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total Wells	Footage	Service Strat & Core	Grand Total
1976	17,697	68,827,696	9,438	49,197,689	13,805	69,264,201	40,940	187,289,586	1,674	42,614
1977	18,700	75,191,080	12,119	63,499,875	15,036	77,004,923	45,855	215,695,878	1,453	47,308
1978	19,065	76,621,339	14,405	75,589,964	16,591	86,174,945	50,061	238,386,248	1,610	51,671
1979	20,689	82,142,574	15,166	79,874,886	16,035	81,667,970	51,890	243,685,430	1,472	53,362
1980	32,120	123,263,713	17,132	90,352,071	20,234	97,829,053	69,486	311,444,837	2,076	71,562
1981	42,520	168,705,956	19,742	105,779,081	26,972	132,035,416	89,234	406,520,453	2,366	91,600
1982(1)	39,252	148,232,977	18,810	105,188,321	25,827	121,961,621	83,889	375,382,919	2,212	86,101
1983	37,396	136,270,936	14,505	76,665,745	23,837	103,680,783	75,738	316,617,464	1,984	77,722
1984	~~44,472~~	167,646,000	14,962	81,649,000	25,549	119,501,000	84,983	368,796,000	2,190	87,173
1985	36,458	142,321,000	12,917	70,894,000	21,431	103,563,000	70,806	316,778,000	1,680	72,486
1986	18,537	74,288,000	7,918	42,299,000	12,415	59,876,000	38,870	176,463,000	646	39,516
1987	15,787	62,941,000	7,848	40,611,000	11,292	53,992,000	34,927	157,544,000	440	35,367

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(1) Data beginning with 1982 are for estimated completions rather than reported completions. Therefore, these figures do not correspond to those on Table 15d (state data), which represent reported completions.

Source: American Petroleum Institute.
1982-1983: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1985.
1984: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1986.
1985-1987: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter, 1987.

U.S. WELLS DRILLED BY DEPTH INTERVAL

Year	Depth Interval (Feet) Under 5,000	5,000-9,999	10,000-14,999	15,000-19,999	20,000-over	Total Wells Drilled
1959	34,867	11,719	2,757	220	(1)	49,563
1960	30,575	10,485	2,835	238	(1)	44,133
1961	30,289	10,658	2,789	252	(1)	43,988
1962	29,496	11,103	3,062	283	(1)	43,944
1963	28,524	10,342	2,723	264	(1)	41,853
1964	29,913	10,649	2,604	320	(1)	43,486
1965	25,697	11,081	2,491	327	(1)	39,596
1966	22,178	9,703	2,251	355	34	34,521
1967	20,359	8,668	2,130	343	38	31,538
1968	17,999	8,958	2,264	308	47	29,576
1969	17,067	9,690	2,378	300	46	29,481
1970	16,941	8,644	2,142	361	85	28,173
1971	15,909	7,947	2,005	338	69	26,268
1972	16,736	8,441	2,226	470	61	27,934
1973	16,272	8,848	2,105	389	78	27,692
1974	20,822	9,617	2,178	339	81	33,037
1975	24,632	11,299	2,504	387	62	38,884
1976	26,257	11,592	2,707	330	54	40,940
1977	28,923	13,350	3,121	402	59	45,855
1978	31,717	14,103	3,610	569	62	50,061
1979	33,253	14,121	3,824	606	86	51,890
1980	46,320	18,083	4,270	716	77	69,486
1981	58,780	23,884	5,578	894	98	89,234
1982	55,190	20,457	5,586	1,147	137	82,517
1983	50,247	17,813	4,227	692	69	73,048
1984	55,100	22,072	5,127	661	46	83,006
1985	45,197	18,877	4,686	625	43	69,428
1986	23,450	10,502	2,752	371	30	37,105
1987	15,870	8,101	1,917	249	3	26,140

Source: 1959-1969, API, Joint Association Survey.
1970-1981, API, Well Completions and Footage Drilled in the United States, 1970-1982.
1982-1983, Quarterly Completion Report, Fourth Quarter 1985.
1984, Quarterly Completion Report, Fourth Quarter 1986.
1985-1987, Quarterly Completion Report, Fourth Quarter 1987.

Section III
Table 4

U.S. PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

	SEISMIC			GRAVITY-MAGNETIC-OTHER			ALL METHODS		
Year	Company	Contractor	Total	Company	Contractor	Total	Company	Contractor	Total
1951	(1)	(1)	6,537	(1)	(1)	802	(1)	(1)	7,339
1952	(1)	(1)	7,958	(1)	(1)	965	(1)	(1)	8,923
1953	(1)	(1)	7,666	(1)	(1)	1,006	(1)	(1)	8,672
1954	(1)	(1)	6,863	(1)	(1)	1,106	(1)	(1)	7,969
1955	2,791	4,299	7,090	419	655	1,150(2)	3,210	4,954	8,240(2)
1956	2,948	3,865	6,813	381	663	1,044	3,329	4,528	7,857
1957	2,834	3,449	6,283	442	517	959	3,276	3,966	7,242
1958	2,334	2,730	5,064	340	327	667	2,674	3,057	5,731
1959	2,289	2,808	5,097	278	321	599	2,567	3,129	5,696
1960	1,979	2,646	4,625	258	324	582	2,237	2,970	5,207
1961	1,747	2,810	4,557	163	304	467	1,910	3,114	5,024
1962	1,322	2,593	3,915	112	204	316	1,434	2,797	4,231
1963	1,618	2,348	3,966	75	133	208	1,693	2,481	4,174
1964	1,360	2,742	4,102	76	228	309(4)	1,436	2,970	4,411(4)
1965	1,635	2,612	4,247	59	165	224	1,694	2,777	4,471
1966	1,496	2,176	3,672	57	88	163(5)	1,553	2,264	3,835(5)
1967	1,255	2,082	3,337	59	100	159	1,314	2,182	3,496
1968	1,138	2,130	3,268	15	104	122(6)	1,153	2,234	3,390(6)
1969	1,048	2,108	3,156	24	292	316	1,072	2,400	3,472
1970	781	1,559	2,340	12	169	181	793	1,728	2,521
1971	656	1,999	2,655	10	97	107	666	2,096	2,762
1972	622	2,394	3,016	6	118	124	628	2,512	3,140
1973	607	2,392	2,999	18	56	74	625	2,448	3,073
1974	540	3,122	3,662	(1)	(1)	230	(1)	(1)	3,892

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(1) Company-contractor data are not available.
(2) Includes 76 magnetometer crew months not allocated to either company or contractor.
(3) Percentages do not equal 100 percent due to unallocated crew months included in total.
(4) Includes 5 other crew months not allocated to either company or contractor.
(5) Includes 18 magnetometer crew months not allocated to either company or contractor.
(6) Includes 3 magnetometer crew months not allocated to either company or contractor.

Source: Society of Exploration Geophysicists, Annual Reports.

U.S. PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

	SEISMIC			GRAVITY-MAGNETIC-OTHER			ALL METHODS		
Year	Company	Contractor	Total	Company	Contractor	Total	Company	Contractor	Total
1975	543	2,860	3,416(2)	(1)	(1)	271	(1)	(1)	3,687
1976	484	2,646	3,140(2)	(1)	(1)	245	(1)	(1)	3,385
1977	499	2,564	3,063(2)	(1)	(1)	120	(1)	(1)	3,183
1978	478	3,670	4,148(2)	(1)	(1)	196	(1)	(1)	4,344
1979	829	3,571	4,400(2)	(1)	(1)	199	(1)	(1)	4,599
1980	1,292	3,669	4,962	(1)	(1)	311	(1)	(1)	5,273
1981	1,038	4,839	5,877	(1)	(1)	382	(1)	(1)	6,259
1982	653	5,023	5,676	(1)	(1)	492	(1)	(1)	6,168
1983	588	4,356	4,944	(1)	(1)	334	(1)	(1)	5,278
1984	737	3,918	4,655	(1)	(1)	217	(1)	(1)	4,872
1985	470	3,024	3,494	(1)	(1)	279	(1)	(1)	3,773
1986	401	1,615	2,016	(1)	(1)	84	(1)	(1)	2,100
1987	283	1,278	1,561	(1)	(1)	258	(1)	(1)	1,819

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(1) Company-contractor data are not available.
(2) Total includes government and university activity unallocated to company-contractor totals.

Source: Society of Exploration Geophysicists, Annual Reports.

FREE WORLD PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

Year	United States	Canada	Latin America	Total Western Hemisphere	Western Europe	Africa	Middle East	Asia	Total Free World
1954	7,969	1,652	1,210	10,831	(1)	(1)	(1)	(1)	12,424
1955	8,240	1,599	1,148	10,987	(1)	(1)	(1)	(1)	13,430
1956	7,857	1,512	1,206	10,575	1,329	797	475	451	13,627
1957	7,242	1,389	1,328	9,959	1,778	892	428	598	13,655
1958	5,731	1,130	1,687	8,548	1,749	1,167	589	537	12,590
1959	5,696	841	1,478	8,015	1,225	1,152	492	597	11,481
1960	5,207	686	1,180	7,073	1,118	1,437	334	564	10,526
1961	5,024	664	995	6,683	1,314	1,472	213	521	10,203
1962	4,231	692	1,107	6,030	1,136	1,130	177	726	9,199
1963	4,174	745	1,153	6,072	1,094	978	233	968	9,345
1964	4,411	673	1,133	6,217	1,035	766	283	909	9,210
1965	4,471	801	1,127	6,399	1,039	721	350	1,180	9,689
1966	3,835	1,039	1,012	5,886	890	925	296	1,043	9,040
1967	3,496	1,155	1,078	5,729	1,057	1,082	266	921	9,055
1968	3,390	970	1,012	5,372	711	679	296	708	7,766
1969	3,472	960	898	5,330	676	864	460	935	8,265
1970	2,521	806	1,052	4,379	725	802	286	1,009	7,201
1971	2,762	334	1,105	4,201	738	915	254	1,578	7,686
1972	3,140	503	1,146	4,789	692	938	239	957	7,615
1973	3,073	585	1,236	4,894	627	798	294	950	7,563
1974	3,892	487	1,572	5,951	702	835	389	1,008	8,897(2)
1975	3,687	597(3)	790(3)	5,074	679(3)	676(3)	306(3)	440(3)	7,185(2)
1976	3,385	421(3)	559(3)	4,365	592(3)	674(3)	351(3)	338(3)	6,353(2)
1977	3,183	766	480(4)	4,429	646	806	309	254	6,497(2)
1978	4,148	782	980	5,910	535	613	330	280	7,668(2)
1979	4,400	761	485	5,646	647	674	345	372	7,746(2)

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(1) Area total not available.
(2) Includes crew months allocated to international waters and other areas not specifically identified, 1974-12, 1975-10, 1976-33, 1977-53, 1978-100, 1979-62.
(3) Seismic activity only.
(4) Only partial data for Mexico included.

Source: Society of Exploration Geophysicists, Annual Reports

FREE WORLD PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

Year	United States	Canada	Latin America	Total Western Hemisphere	Western Europe	Africa	Middle East	Asia	Total Free World
1980	4,962	695	645	6,302	569	688	346	520	8,565(2)
1981	5,877	584	1,261	7,722	733	973	452	436	10,706(2)
1982	5,676	527	808	7,011	798	755	480	752	9,821(2)
1983	4,944	658	703	6,305	744	660	359	700	8,789(2)
1984	4,655	616	678	5,949	770	658	351	703	8,465(2)
1985	3,494	899	751	5,144	756	581	347	560	7,388(2)
1986	2,016	453	676	3,145	703	558	295	636	5,337(2)
1987	1,561	382	586	2,519	435	346	295	522	4,142(2)

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(2) Includes crew months allocated to international waters and other areas not specifically identified.

Source: Society of Exploration Geophysicists, Annual Reports

Section III
Table 6

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD OIL DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
1947	3	7	11	52	129	48	250	73	3,325	2.20
1948	2	2	9	59	241	33	346	72	4,087	1.76
1949	9	4	9	65	172	78	337	87	4,238	2.05
1950	3	10	15	69	283	56	436	97	5,149	1.88
1951	1	1	13	71	345	61	492	86	6,044	1.42
1952	2	2	11	70	361	90	536	85	6,440	1.32
1953	1	6	17	88	283	134	529	112	6,634	1.69
1954	2	3	12	82	308	179	586	99	7,033	1.41
1955	2	5	13	95	329	178	622	115	7,743	1.49
1956	0	2	2	92	333	124	553	96	8,436	1.14
1957	1	1	7	63	339	186	597	72	7,556	0.95
1958	3	2	16	82	229	157	489	103	6,618	1.56
1959	0	4	3	52	255	110	424	59	7,031	0.84
1960	1	3	5	35	283	143	470	44	7,320	0.60
1961	0	1	4	47	246	68	366	52	6,909	0.75
1962	0	1	3	44	264	78	390	48	6,794	0.71
1963	2	1	7	41	341	100	492	51	6,570	0.78
1964	0	3	9	48	248	109	417	60	6,623	0.91
1965	2	3	5	35	268	63	376	45	6,175	0.73
1966	3	1	3	40	336	6	389	47	6,158	0.76
1967	1	4	2	39	278	24	348	46	5,271	0.87
1968	3	5	1	38	210	63	320	47	5,205	0.90
1969	2	3	2	41	245	28	321	48	5,956	0.81
TOTAL	43	74	179	1,348	6,326	2,116	10,086	1,644	143,315	1.15

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), P. 2043.

A Fields......................Over 50 million barrels
B Fields........................25-50 million barrels
C Fields........................10-25 million barrels
D Fields..........................1-10 million barrels
E Fields..................Less than 1 million barrels
F Fields..................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 6a

HISTORICAL RECORD:
NUMBER OF U.S. NEW FIELD OIL DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
Cumulative total 1947-1969	43	74	179	1,348	6,326	2,116	10,086	1,644	143,315	1.15
1970	8	0	5	36	199	17	265	49	4,468	1.10
1971	1	1	3	28	184	13	230	33	4,402	0.75
1972	0	1	1	42	234	12	290	44	5,079	0.87
1973	0	2	4	26	252	7	291	32	4,983	0.64
1974	0	1	0	40	296	7	344	41	5,646	0.73
1975	0	2	3	37	373	8	423	42	6,096	0.69
1976	1	1	5	42	389	19	457	49	5,831	0.84
1977	0	4	3	27	409	12	455	34	6,121	0.56
1978	0	1	0	26	392	11	430	27	6,497	0.42
1979	0	0	2	24	437	19	482	26	6,406	0.41
1980	0	0	1	34	576	35	646	35	7,026	0.50
TOTAL	53	87	206	1,710	10,067	2,276	14,399	2,056	205,870	1.00

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2043.

A Fields........................Over 50 million barrels
B Fields........................25-50 million barrels
C Fields........................10-25 million barrels
D Fields........................1-10 million barrels
E Fields..................Less than 1 million barrels
F Fields..................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 7

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
1947	5	5	4	30	35	19	98	44	3,325	1.32
1948	3	3	7	33	35	19	100	46	4,087	1.13
1949	8	7	8	34	43	12	112	57	4,238	1.34
1950	4	4	8	28	44	19	107	44	5,149	0.85
1951	10	4	10	41	57	16	138	65	6,044	1.08
1952	10	7	7	44	65	15	148	68	6,440	1.06
1953	3	3	6	40	89	18	159	52	6,634	0.78
1954	4	1	12	51	104	39	211	68	7,033	0.97
1955	2	3	11	33	107	43	199	49	7,743	0.63
1956	2	4	5	52	92	26	181	63	8,436	0.75
1957	9	5	15	70	105	30	234	99	7,556	1.31
1958	3	6	9	55	143	25	241	73	6,618	1.10
1959	4	1	6	51	135	28	225	62	7,031	0.88
1960	6	2	9	63	135	22	237	80	7,320	1.09
1961	4	3	4	35	156	40	242	46	6,909	0.67
1962	3	4	11	61	161	52	292	79	6,794	1.16
1963	4	1	7	38	124	41	215	50	6,570	0.76
1964	4	1	11	37	136	37	226	53	6,623	0.80
1965	1	3	10	38	142	30	224	52	6,175	0.84
1966	1	3	7	36	142	12	201	47	6,158	0.76
1967	4	5	6	26	111	12	164	41	5,271	0.78
1968	1	5	7	27	83	14	137	40	5,205	0.77
1969	3	2	4	35	116	14	174	44	5,956	0.74
TOTAL	98	82	184	958	2,360	583	4,265	1,322	143,315	0.92

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(1) Differs from year-of-discovery total because of consolidations. The reserve estimates for the years 1952 and prior were not specifically based upon six years of development history. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2042.

A Fields......................Over 300 billion cubic feet
B Fields......................150-300 billion cubic feet
C Fields......................60-150 billion cubic feet
D Fields.........................6-60 billion cubic feet
E Fields...........................6 billion cubic feet
F Fields......................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
Cumulative total 1947-1969	98	82	184	958	2,360	583	4,265	1,322	143,315	0.92
1970	4	3	4	25	110	14	160	36	4,468	0.81
1971	1	2	5	45	135	13	201	53	4,402	1.20
1972	3	4	6	52	214	2	281	65	5,079	1.28
1973	1	5	10	59	326	23	424	75	4,983	1.51
1974	1	3	5	61	352	11	433	70	5,646	1.24
1975	2	1	4	69	354	5	435	76	6,096	1.25
1976	2	2	7	63	444	10	528	74	5,831	1.27
1977	2	1	3	62	426	7	501	68	6,121	1.11
1978	1	2	5	58	434	10	510	66	6,497	1.02
'979	0	2	5	29	629	10	675	36	6,406	0.56
1980	0	1	5	49	632	14	701	55	7,026	0.78
TOTAL	115	108	243	1,530	6,416	702	9,114	1,996	205,870	0.97

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2042.

A Fields......................Over 300 billion cubic feet
B Fields......................150-300 billion cubic feet
C Fields......................60-150 billion cubic feet
D Fields..........................6-60 billion cubic feet
E Fields............................6 billion cubic feet
F Fields......................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 8

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD OIL AND GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil & Gas Fields	Total New-Field Wildcats Drilled	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)							A-D INCLUSIVE (A+B+C+D)		
1947	8	12	15	82	164	67	348	117	3,325	3.52
1948	5	5	16	92	276	52	446	118	4,087	2.89
1949	17	11	17	99	215	90	449	144	4,238	3.40
1950	7	14	23	97	327	75	543	141	5,149	2.74
1951	11	5	23	112	402	77	630	151	6,044	2.50
1952	12	9	18	114	426	105	684	153	6,440	2.38
1953	4	9	23	128	372	152	688	164	6,634	2.47
1954	6	4	24	133	412	218	797	167	7,033	2.37
1955	4	8	24	128	436	221	821	164	7,743	2.12
1956	2	6	7	144	425	150	734	159	8,436	1.88
1957	10	6	22	133	444	216	831	171	7,556	2.26
1958	6	8	25	137	372	182	730	176	6,618	2.66
1959	4	5	9	103	390	138	649	121	7,031	1.72
1960	7	5	14	98	418	165	707	124	7,320	1.69
1961	4	4	8	82	402	108	608	98	6,909	1.42
1962	3	5	14	105	425	130	682	127	6,794	1.87
1963	6	2	14	79	465	141	707	101	6,570	1.54
1964	4	4	20	85	384	146	643	113	6,623	1.71
1965	3	6	15	73	410	93	600	97	6,175	1.57
1966	4	4	10	76	478	18	590	94	6,158	1.53
1967	5	9	8	65	389	36	512	87	5,271	1.65
1968	4	10	8	65	293	77	457	87	5,205	1.67
1969	5	5	6	76	361	42	495	92	5,956	1.54
TOTAL	141	156	363	2,306	8,686	2,699	14,351	2,966	143,315	2.07

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(1) Differs from year-of-discovery total because of consolidations.

A Fields	Over 50 million barrels or over 300 billion cubic feet
B Fields	25-50 million barrels or 150-300 billion cubic feet
C Fields	10-25 million barrels or 60-150 billion cubic feet
D Fields	1-10 million barrels or 6-60 billion cubic feet
E Fields	Less than 1 million barrels or less than 6 billion cubic feet
F Fields	Abandoned as non-profitable

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 8a

HISTORICAL RECORD:
NUMBER OF U.S. NEW FIELD OIL AND GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil & Gas Fields	Total New-Field Wildcats Drilled	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)	A-D INCLUSIVE (A+B+C+D)		
	(SIGNIFICANT)									
Cumulative total 1947-1969	141	156	363	2,306	8,686	2,699	14,351	2,966	143,315	2.07
1970	12	3	9	61	309	31	425	85	4,468	1.90
1971	2	3	8	73	319	26	431	86	4,402	1.95
1972	3	5	7	94	448	14	571	109	5,079	2.15
1973	1	7	14	85	578	30	715	107	4,983	2.15
1974	1	4	5	101	648	18	777	111	5,646	1.97
1975	2	3	7	106	727	13	858	118	6,096	1.94
1976	3	3	12	105	833	29	985	123	5,831	2.11
1977	2	5	6	89	835	19	956	102	6,121	1.67
1978	1	3	5	84	826	21	940	93	6,497	1.43
1979	0	2	7	53	1,066	29	1,157	62	6,406	0.97
1980	0	1	6	83	1,208	49	1,347	90	7,026	1.28
TOTAL	168	195	449	3,240	16,483	2,978	23,513	4,082	205,870	1.98

(1) Differs from year-of-discovery total because of consolidations.

A Fields......................Over 50 million barrels or over 300 billion cubic feet
B Fields........................25-50 million barrels or 150-300 billion cubic feet
C Fields..........................10-25 million barrels or 60-150 billion cubic feet
D Fields.............................1-10 million barrels or 6-60 billion cubic feet
E Fields..............Less than 1 million barrels or less than 6 billion cubic feet
F Fields..Abandoned as non-profitable

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 9

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, ONSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)
1959	25,136	94,331.7	1,232,591.0	3,753	49,037	13.07	4,974	26,688.7	460,307.0	5,366	92,543	17.25
1960	20,933	81,168.8	914,306.8	3,878	43,678	11.26	5,175	28,035.4	487,477.5	5,417	94,199	17.39
1961	20,868	79,736.6	971,144.0	3,821	46,537	12.18	5,588	29,454.2	489,799.2	5,271	87,652	16.63
1962	20,060	83,168.5	1,041,452.5	4,146	51,917	12.52	5,743	30,171.3	511,755.7	5,254	89,109	16.96
1963	20,306	77,410.4	940,225.3	3,812	46,303	12.15	4,689	24,626.5	392,325.1	5,252	83,669	15.93
1964	20,535	76,376.6	898,606.9	3,719	43,760	11.77	4,749	25,991.9	447,248.1	5,473	94,177	17.21
1965	18,370	74,627.6	873,769.0	4,062	47,565	11.71	4,654	25,113.4	418,669.6	5,396	89,959	16.67
1966	15,312	60,104.3	745,319.5	3,925	48,676	12.40	3,914	23,217.3	446,177.6	5,932	113,995	19.22
1967	14,196	53,676.0	692,118.9	3,781	48,755	12.89	3,390	19,821.8	401,857.7	5,847	118,542	20.27
1968	13,010	51,828.6	699,182.3	3,984	53,742	13.49	3,145	18,536.1	387,216.3	5,894	123,121	20.89
1969	12,330	52,726.3	790,280.2	4,276	64,094	14.99	3,705	21,237.3	439,917.4	5,732	118,736	20.71
1970	12,014	51,734.0	806,429.0	4,306	67,124	15.59	3,651	21,044.0	478,705.0	5,764	131,116	22.75
1971	11,096	45,672.2	731,152.7	4,116	65,893	16.01	3,494	20,086.7	471,309.2	5,749	134,891	23.46
1972	10,421	45,126.0	792,435.2	4,330	76,042	17.56	4,856	26,424.0	626,559.7	5,442	129,028	23.71
1973	9,407	41,980.9	825,029.7	4,462	87,704	19.65	6,243	34,368.7	843,960.4	5,505	135,185	24.56
1974	12,820	49,662.3	1,270,731.1	3,874	99,121	25.59	6,540	35,552.2	1,114,933.6	5,436	170,479	31.36

	DRY HOLES						ONSHORE WELLS DRILLED					
1953(1)							49,197	198,056.0	2,447,219.3	4,026	49,743	12.36
1955(1)							55,517	221,197.2	2,439,924.0	3,984	43,949	11.03
1956(1)							56,646	227,580.3	2,669,624.0	4,018	47,128	11.73
1959	18,977	79,735.0	775,839.0	4,202	40,883	9.73	49,087	200,755.5	2,468,737.0	4,090	50,293	12.30
1960	17,427	71,568.4	716,918.5	4,107	41,138	10.02	43,595	180,772.6	2,216,900.0	4,147	50,852	12.26
1961	16,926	71,394.0	706,003.7	4,218	41,711	9.89	43,382	180,584.7	2,166,926.9	4,163	49,950	12.00
1962	16,381	72,462.6	751,889.5	4,424	45,900	10.38	43,184	185,802.4	2,305,097.8	4,303	53,379	12.41
1963	16,072	71,272.9	679,103.1	4,435	42,254	9.53	41,067	173,309.8	2,011,653.4	4,220	48,985	11.61
1964	17,207	76,197.6	723,760.5	4,428	42,062	9.50	42,491	178,566.2	2,069,615.5	4,202	48,707	11.59
1965	15,535	71,075.5	681,175.3	4,575	43,848	9.58	38,559	167,816.5	1,973,613.9	4,352	51,184	11.76
1966	14,168	62,730.4	638,085.6	4,428	45,037	10.17	33,394	146,051.9	1,829,582.8	4,374	54,788	12.53
1967	12,587	57,590.3	591,049.8	4,575	46,957	10.26	30,173	131,088.1	1,685,026.5	4,345	55,846	12.85
1968	12,099	60,145.4	665,359.2	4,971	54,993	11.06	28,254	130,510.1	1,741,757.7	4,619	61,646	13.35
1969	12,255	63,091.7	708,336.3	5,148	57,800	11.23	28,290	137,055.3	1,944,533.9	4,845	68,736	14.19
1970	10,454	53,874.0	695,037.0	5,153	66,485	12.90	26,119	126,652.0	1,980,171.0	4,849	75,813	15.63
1971	9,566	49,877.6	646,412.5	5,214	67,574	12.96	24,156	115,636.6	1,848,874.4	4,787	76,539	15.99
1972	10,173	53,984.4	762,721.5	5,307	74,975	14.13	25,450	125,534.4	2,181,716.4	4,933	85,726	17.38
1973	9,713	51,957.0	827,228.3	5,349	85,167	15.92	25,356	128,306.7	2,496,218.3	5,060	98,447	19.46
1974	11,291	58,327.5	1,301,354.0	5,166	115,256	22.31	30,651	143,542.0	3,687,018.7	4,683	120,290	25.69

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(1) Data pertaining to well classification not available.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 9a

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, ONSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	15,993	63,641.3	2,003,955.3	3,979	125,302	31.49	7,383	40,613.6	1,667,555.1	5,501	225,864	41.06
1976	16,603	65,636.2	2,227,303.1	3,953	134,151	33.93	8,631	45,714.7	2,011,603.6	5,297	233,067	44.00
1977	17,789	72,090.0	2,654,029.9	4,052	149,195	36.82	11,086	58,791.0	2,924,519.8	5,303	263,803	49.74
1978	17,492	71,596.0	3,157,053.7	4,093	180,485	44.10	12,887	68,610.9	3,996,244.5	5,324	310,098	58.25
1979	18,894	77,021.0	3,983,757.0	4,076	210,847	51.73	13,626	72,733.1	5,010,426.4	5,337	367,710	68.90
1980	28,236	114,228.1	6,924,130.2	4,045	245,223	60.62	14,781	81,400.8	6,720,984.8	5,507	454,704	82.57
1981	38,310	158,514.8	11,948,475.5	4,138	311,889	75.38	17,018	95,089.6	10,125,963.9	5,588	595,015	106.49
1982	35,379	140,035.3	10,895,210.4	3,958	307,957	77.81	16,610	96,211.9	12,572,614.1	5,792	756,930	130.69
1983	33,026	126,511.5	8,004,608.8	3,831	242,373	63.27	12,626	69,362.9	6,642,729.5	5,494	526,115	95.76
1984	38,490	149,635.8	8,891,781.7	3,888	231,015	59.42	14,611	78,856.6	5,986,152.1	5,397	409,702	75.91
1985	33,431	133,489.2	7,875,373.3	3,993	235,571	59.00	13,547	72,431.8	5,747,252.8	5,347	424,245	79.34
1986	17,865	72,708.4	4,143,102.8	4,070	231,912	56.98	7,144	39,023.8	2,902,637.2	5,462	406,304	74.39
1987	15,102	62,430.3	3,073,405.2	4,134	203,510	49.23	7,113	38,125.7	2,338,144.9	5,360	328,714	61.33
	DRY HOLES						ONSHORE WELLS DRILLED					
1975	12,556	63,604.0	1,725,506.8	5,066	137,425	27.13	35,932	167,859.0	5,397,017.2	4,672	150,201	32.15
1976	12,679	63,250.0	1,747,814.4	4,989	137,851	27.63	37,913	174,600.9	5,986,721.1	4,605	157,907	34.29
1977	13,734	70,293.6	2,321,990.2	5,118	169,069	33.03	42,609	201,174.6	7,900,540.0	4,721	185,420	39.29
1978	15,079	78,655.3	3,330,509.1	5,216	220,870	42.34	45,458	218,862.2	10,483,807.4	4,814	230,626	47.91
1979	14,743	75,365.5	3,877,721.7	5,111	263,021	51.46	47,263	225,119.6	12,871,899.2	4,763	272,346	57.18
1980	17,722	87,898.7	5,308,941.9	4,959	299,567	60.41	60,739	283,527.7	18,954,056.8	4,667	312,057	66.86
1981	24,012	120,773.3	9,040,265.1	5,030	376,489	74.85	79,340	374,377.6	31,114,704.4	4,719	392,169	83.11
1982	23,199	111,833.9	9,806,473.8	4,821	422,711	87.68	75,188	348,081.1	33,274,298.3	4,629	442,548	95.60
1983	20,614	92,519.6	5,496,480.3	4,488	266,638	59.41	66,266	288,393.9	20,143,818.7	4,352	303,984	69.85
1984	22,688	107,837.2	5,304,338.9	4,753	233,795	49.19	75,789	336,329.6	20,182,272.7	4,438	266,296	60.01
1985	19,596	95,753.4	4,994,684.7	4,886	254,883	52.17	55,574	301,674.4	18,617,310.9	4,531	279,648	61.72
1986	11,266	55,149.6	2,910,348.2	4,895	258,330	52.77	36,275	166,881.9	9,956,088.3	4,600	274,461	59.67
1987	10,117	49,455.4	1,773,914.1	4,888	175,340	35.87	32,332	150,011.3	7,185,464.1	4,640	222,240	47.90

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, OFFSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1959	227	2,599.6	88,835.0	9,385	320,704	34.17	75	896.7	48,588.0	11,956	647,840	54.18
1960	301	2,865.0	98,197.1	9,518	326,236	34.27	87	1,042.9	52,700.8	11,988	605,757	50.53
1961	336	3,187.5	115,617.3	9,487	344,099	36.27	86	990.2	47,654.8	11,515	554,125	48.12
1962	342	3,326.0	119,019.6	9,725	348,011	35.78	115	1,260.5	57,016.1	10,961	495,792	45.23
1963	372	3,689.4	130,913.0	9,918	351,917	35.48	90	1,051.2	49,100.6	11,680	545,563	46.71
1964	477	4,612.2	164,388.0	9,669	344,629	35.64	125	1,502.0	63,316.0	12.016	506,528	42.16
1965	487	4,919.9	193,026.3	10,103	396,358	39.23	118	1,379.7	67,430.4	11,693	571,444	48.87
1966	544	5,449.4	240,434.0	10,017	441,974	44.12	146	1,756.8	97,073.9	12,033	664,890	55.25
1967	739	6,258.3	303,250.0	8,469	410,352	48.46	168	1,939.8	99,803.2	11,547	594,067	51.45
1968	757	6,627.4	390,146.0	8,755	515,384	58.87	179	1,995.7	106,519.8	11,149	595,083	53.38
1969	585	5,208.2	320,848.3	8,903	548,459	61.61	222	2,457.8	166,088.0	11,071	748,144	67.57
1970	533	4,683.0	281,628.0	8,786	528,382	60.14	193	2,049.0	138,878.0	10,617	719,575	67.78
1971	309	2,913.0	163,352.3	9,427	528,648	56.08	185	2,035.1	141,544.6	11,001	765,106	69.55
1972	332	3,273.5	213,035.8	9,860	641,674	65.08	230	2,460.6	175,825.9	10,698	764,460	71.46
1973	296	2,686.2	181,945.6	9,075	614,681	67.73	193	1,968.2	153,971.2	10,198	797,778	78.23
1974	253	2,102.9	169,594.7	8,312	670,335	80.65	155	1,578.8	151,606.7	10,186	978,108	96.02

	DRY HOLES							OFFSHORE WELLS DRILLED					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
							1953(1)	82(2)	783.0	24,499.0	9,549	298,768	31.29
							1955(1)	414(3)	3,959.8	160,219.0	9,565	387,002	40.46
							1956(1)	479(4)	4,593.4	198,786.0	9,590	415,002	43.28
1959	124	1,260.6	44,936.0	10,166	362,387	35.65		476	4,756.9	182,359.0	9,994	383,107	38.34
1960	150	1,700.4	56,620.4	11,336	337,469	33.30		538	5,608.4	207,518.3	10,424	385,722	37.00
1961	184	1,906.6	67,963.7	10,362	369,368	35.65		606	6,084.4	231,235.8	10,040	381,577	38.00
1962	303	3,168.2	95,541.9	10,456	315,320	30.16		760	7,754.8	271,577.6	10,204	357,339	35.02
1963	324	3,429.7	111,196.9	10,586	343,200	32.42		786	8,170.2	291,210.6	10,395	370,497	35.64
1964	393	4,065.2	130,047.6	10,344	330,910	31.99		995	10,179.3	357,751.7	10,230	359,549	35.14
1965	432	4,588.9	167,366.0	10,623	387,421	36.47		1,037	10,888.6	427,822.6	10,500	412,558	39.29
1966	437	4,664.1	193,649.6	10,673	443,134	41.52		1,127	11,870.3	531,157.5	10,533	471,302	44.75
1967	458	4,719.5	211,098.7	10,305	460,914	44.73		1,365	12,917.7	614,151.9	9,464	449,928	47.54
1968	386	3,995.5	170,936.8	10,351	442,841	42.78		1,322	12,618.6	667,602.7	9,545	504,994	52.91
1969	384	3,983.9	179,201.1	10,375	466,670	44.98		1,191	11,649.9	666,137.4	9,782	559,309	57.18
1970	332	3,506.0	178,005.0	10,560	536,160	50.77		1,058	10,238.0	598,511.0	9,677	565,700	58.46
1971	390	4,059.3	217,720.1	10,409	558,257	53.63		884	9,007.4	522,617.1	10,189	591,196	58.02
1972	431	4,267.0	243,587.6	9,900	565,169	57.09		993	10,001.1	632,449.4	10.072	636,908	63.24
1973	399	3,699.7	242,397.1	9,272	607,512	65.52		888	8,354.1	578,313.9	9,408	651,254	69.23
1974	422	3,720.5	358,768.7	8,816	850,163	96.43		830	7,402.3	679,970.1	8,918	819,241	91.86

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(1) Data pertaining to well classification not available.
(2) Louisiana only.
(3) Includes Louisiana and Texas.
(4) Includes Louisiana, Texas and California.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute. Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 10a

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, OFFSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	283	2,426.5	252,551.7	8,574	892,409	104.08	271	2,762.3	337,855.3	10,193	1,246,699	122.31
1976	275	2,621.0	322,349.5	9,531	1,172,180	122.99	273	2,651.1	395,815.0	9,711	1,449,872	149.30
1977	288	2,570.4	418,724.6	8,924	1,453,905	162.90	393	3,722.3	674,579.0	9,471	1,716,486	181.23
1978	298	2,814.7	542,[illegible]71.4	9,445	1,822,051	192.91	419	4,208.6	982,577.3	10,044	2,345,053	233.48
1979	349	3,240.0	694,[illegible]03.4	9,283	1,990,841	214.46	453	4,606.7	1,227,705.6	10,169	2,710,166	266.51
1980	317	2,838.0	844,306.7	8,952	2,663,428	297.52	444	4,418.8	1,445,737.8	9,952	3,256,166	327.19
1981	415	3,467.3	1,074,328.8	8,355	2,588,744	309.85	515	5,168.0	2,122,169.8	10,035	4,120,718	410.64
1982	486	4,269.2	1,563,370.0	8,784	3,216,811	366.21	442	4,591.6	2,165,054.2	10,388	4,898,313	471.54
1983	459	4,312.4	1,499,152.3	9,395	3,266,127	347.65	293	3,124.5	1,213,032.8	10,664	4,140,044	388.96
1984	486	4,381.8	1,322,458.1	9,016	2,721,107	301.81	372	3,787.6	1,352,636.1	10,182	3,636,119	357.12
1985	369	3,400.2	1,265,696.9	9,215	3,430,073	372.23	307	3,274.7	1,299,888.9	10,667	4,234,166	396.94
1986	333	3,138.9	1,040,990.1	9,426	3,126,096	331.65	207	2,300.1	941,245.4	11,112	4,547,079	409.20
1987	224	2,171.7	696,024.5	9,695	3,107,252	320.50	142	1,548.4	421,324.9	10,904	2,967,077	272.11
	DRY HOLES						OFFSHORE WELLS DRILLED					
1975	474	4,594.4	583,789.7	9,693	1,231,624	127.06	1,028	9,783.2	1,174,196.7	9,517	1,142,215	120.02
1976	480	4,545.2	756,794.7	9,469	1,576,656	166.51	1,028	9,817.2	1,474,959.2	9,550	1,434,785	150.24
1977	536	5,227.2	962,609.5	9,752	1,795,913	184.15	1,217	11,519.9	2,055,913.1	9.466	1,689,329	178.47
1978	480	4,733.4	1,051,734.0	9,861	2,191,112	222.20	1,197	11,756.7	2,577,282.7	9,821	2,153,118	219.24
1979	458	4,545.7	1,284,522.2	9,925	2,804,633	282.58	1,260	12,392.5	3,207,031.2	9,835	2,545,262	258.80
1980	511	5,246.4	1,556,254.3	10,266	3,045,507	296.66	1,272	12,503.3	3,846,298.9	9,829	3,023,819	307.64
1981	546	5,787.8	2,354,253.5	10,599	4,311,820	406.80	1,476	14,422.5	5,550,752.1	9,771	3,760,672	384.87
1982	536	5,676.3	2,425,396.1	10,590	4,524,993	427.29	1,464	14,537.1	6,153,820.3	9,930	4,203,429	423.31
1983	518	5,395.0	2,248,538.9	10,415	4,340,809	416.78	1,270	12,831.9	4,960,724.0	10,104	3,906,082	386.59
1984	563	6,089.8	2,348,852.4	10,817	4,172,029	385.70	1,421	14,259.2	5,023,946.6	10,035	3,535,501	352.33
1985	571	6,141.0	2,513,705.9	10,755	4,402,287	409.32	1,247	12,815.9	5,079,291.7	10,277	4,073,287	396.35
1986	358	3,968.7	1,614,079.2	11,086	4,508,601	406.69	898	9,407.7	3,596,314.6	10,476	4,004,805	382.28
1987	343	3,625.1	935,935.9	10,569	2,728,676	258.18	709	7,345.3	2,053,285.3	10,360	2,896,030	279.64

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute. Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

UNITED STATES
ESTIMATED DRILLING COSTS, ALL WELLS BY CLASSIFICATION

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg. Cost Per Foot (
1959	25,413	96,931.3	1,321,426.0	3,814	51,998	13.63	5,049	27,585.5	508,895.0	5,464	100,791	18.45
1960	21,294	84,033.9	1,110,701.1	3,946	52,160	13.22	5,262	29,078.3	540,179.3	5,526	102,656	18.58
1961	21,204	82,924.1	1,086,761.4	3,911	51,253	13.11	5,674	30,444.4	537,433.9	5,366	94,719	17.65
1962	21,402	86,494.5	1,160,472.1	4,041	54,223	13.42	5,858	31,431.8	568,771.8	5,366	97,093	18.10
1963	20,678	81,099.8	1,071,138.2	3,922	51,801	13.21	4,779	25,677.7	441,425.7	5,373	92,368	17.19
1964	21,012	80,988.9	1,062,994.9	3,854	50,590	13.13	4,874	27,493.8	510,564.1	5,641	104,753	18.57
1965	18,857	76,547.5	1,066,795.3	4,059	56,573	13.94	4,772	26,493.2	486,100.0	5,552	101,865	18.35
1966	15,856	65,553.6	985,753.6	4,134	62,169	15.04	4,060	24,974.1	543,251.6	6,151	133,806	21.75
1967	14,935	59,934.3	995,368.9	4,013	66,647	16.61	3,558	21,761.6	501,660.9	6,116	140,995	23.05
1968	13,767	58,456.1	1,089,328.4	4,246	79,126	18.63	3,324	20,531.8	493,736.1	6,177	148,537	24.05
1969	12,915	57,934.4	1,117,128.5	4,486	86,499	19.28	3,927	23,695.2	606,005.4	6,034	154,318	25.58
1970	12,547	56,417.0	1,088,057.0	4,496	86,718	19.29	3,844	23,093.0	617,583.0	6,007	160,662	26.75
1971	11,405	48,585.2	894,505.1	4,260	78,431	18.41	3,679	22,121.8	612,853.8	6,013	166,582	27.70
1972	10,753	48,399.5	1,005,471.1	4,501	93,506	20.77	5,086	28,884.6	802,385.5	5,679	157,764	27.78
1973	9,705	44,667.1	1,006,975.3	4,602	103,758	22.54	6,427	36,336.9	997,931.6	5,654	155,272	27.46
1974	13,073	51,765.2	1,440,325.8	3,960	110,176	27.82	6,695	37,131.1	1,266,540.3	5,546	189,177	34.11
	DRY HOLES						TOTAL WELLS DRILLED					
1959	19,101	80,995.6	820,775.0	4,240	42,970	10.13	49,279	198,839.0	2,471,718.3	4,035	50,158	12.43
1960	17,577	73,268.8	773,538.9	4,168	44,009	10.56	55,931	225,157.0	2,600,143.0	4,026	46,488	11.5
1961	17,110	73,300.6	773,967.3	4,284	45,235	10.56	57,125	232,173.7	2,868,410.0	4,064	50,213	12.35
1962	16,684	75,630.9	847,431.5	4,533	50,793	11.20	49,563	205,512.4	2,651,096.0	4,146	53,500	12.90
1963	16,396	74,702.6	790,300.1	4,556	48,201	10.58	44,133	186,380.9	2,424,418.3	4,223	54,934	13.01
1964	17,600	80,262.7	853,808.2	4,560	48,512	10.64	43,988	186,669.1	2,398,162.6	4,244	54,518	12.85
1965	15,967	75,664.4	848,541.2	4,739	53,143	11.21	43,944	193,557.2	2,576,675.4	4,405	58,635	13.31
1966	14,605	67,394.5	831,735.2	4,614	56,949	12.34	41,853	181,480.1	2,302,864.0	4,336	55,023	12.69
1967	13,045	62,309.9	802,148.5	4,777	61,491	12.87	43,486	188,745.4	2,427,367.2	4,340	55,820	12.86
1968	12,485	64,140.9	826,295.9	5,137	66,183	12.88	39,596	178,705.1	2,401,436.5	4,513	60,648	13.44
1969	12,639	67,075.6	887,537.4	5,307	70,222	13.23	34,521	157,922.3	2,360,740.3	4,575	68,386	14.95
1970	10,786	57,380.0	873,042.0	5,320	80,942	15.21	31,538	144,005.8	2,299,178.4	4,566	72,902	15.97
1971	9,956	53,936.9	864,132.7	5,418	86,795	16.02	29,576	143,128.8	2,409,360.4	4,839	81,463	16.83
1972	10,604	58,251.4	1,006,309.2	5,493	94,899	17.28	29,481	148,705.2	2,610,671.3	5,044	88,554	17.56
1973	10,112	55,656.7	1,069,625.4	5,504	105,778	19.22	27,177	136,890.0	2,578,682.0	5,037	94,885	18.84
1974	11,713	62,048.0	1,660,122.7	5,297	141,733	26.76	25,040	124,644.0	2,371,491.5	4,978	94,703	19.03
							26,443	135,535.5	2,814,165.8	5,126	106,424	20.76
							26,244	136,660.8	3,074,532.3	5,207	117,152	22.50
							31,481	150,944.3	4,366,988.8	4,795	138,718	28.93

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(1) Data pertaining to well classification not available.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry", Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 11a

UNITED STATES
ESTIMATED DRILLING COSTS, ALL WELLS BY CLASSIFICATION

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	16,276	66,067.8	2,256,507.0	4,059	138,640	34.15	7,654	43,375.9	2,005,410.4	5,667	262,008	46.23
1976	16,878	68,257.2	2,549,652.6	4,044	151,064	37.35	8,904	48,365.8	2,407,418.6	5,432	270,375	49.78
1977	18,077	74,660.3	3,072,754.5	4,130	169,981	41.16	11,479	62,513.2	3,599,098.8	5,446	313,538	57.57
1978	17,790	74,410.8	3,700,025.1	4,182	207,983	49.73	13,306	72,819.5	4,978,821.9	5,472	374,178	68.38
1979	19,243	80,261.0	4,678,560.4	4,170	243,130	58.30	14,079	77,339.9	6,238,126.0	5,493	443,080	80.66
1980	28,553	117,066.2	7,768,436.9	4,099	272,070	66.37	15,225	85,819.6	8,166,722.6	5,636	536,402	95.17
1981	38,725	161,982.1	13,022,804.3	4,183	336,289	80.40	17,533	100,257.5	12,248,133.7	5,718	698,576	122.17
1982	35,865	144,304.5	12,458,580.5	4.024	347,374	86.33	17,052	100,803.5	14,737,668.3	5,912	864,278	146.19
1983	33,485	130,823.9	9,503,761.1	3,907	283,821	72.64	12,919	72,487.3	7,855,762.3	5,611	608,078	108.37
1984	38,976	154,017.6	10,214,239.8	3,952	262,065	66.32	14,983	82,644.2	7,338,788.2	5,516	489,808	88.80
1985	33,800	136,889.5	9,141,070.2	4,050	270,446	66.78	13,854	75,706.5	7,047,141.7	5,465	508,672	93.09
1986	18,198	75,847.3	5,184,092.9	4,168	284,872	68.35	7,351	41,324.0	3,843,882.6	5,622	522,906	93.01
1987	15,326	64,602.0	3,769,429.7	4,215	245,950	58.35	7,255	39,674.1	2,759,469.8	5,469	380,354	69.55

	DRY HOLES						TOTAL WELLS DRILLED					
1975	13,030	68,198.4	2,309,296.5	5,234	177,229	33.86	36,960	177,642.1	6,571,213.9	4,806	177,793	36.99
1976	13,159	67,795.2	2,504,609.1	5,152	190,334	36.94	38,941	184,418.1	7,461,680.3	4,736	191,615	40.46
1977	14,270	75,520.8	3,284,599.7	5,292	230,175	43.49	43,826	212,694.4	9,956,453.0	4,853	227,181	46.81
1978	15,559	83,388.7	4,382,243.2	5,359	281,653	52.56	46,655	230,618.9	13,061,090.0	4,943	279,950	56.64
1979	15,201	79,911.3	5,162,244.0	5,256	339,598	64.61	48,523	237,512.1	16,078,930.4	4,894	331,367	67.71
1980	18,233	93,145.1	6,865,196.2	5,108	376,525	73.71	62,011	296,031.0	22,800,355.7	4,773	367,682	77.03
1981	24,558	126,560.5	11,394,518.6	5,154	463,984	90.03	80,816	388,800.1	36,665,456.5	4,811	453,691	94.30
1982	23,735	117,510.1	12,231,869.9	4,951	515,352	104.09	76,652	362,618.2	39,428,118.6	4,731	514,378	108.73
1983	21,132	97,914.6	7,745,019.2	4,633	366,507	79.11	67,536	301,225.8	25,104,542.6	4,460	371,721	83.35
1984	23,251	113,927.0	7,653,191.4	4,900	329,155	67.18	77,210	350,588.7	25,206,219.3	4,541	326,463	71.90
1985	20,167	101,894.4	7,508,390.7	5,053	372,311	73.68	67,821	314,490.4	23,696,602.5	4,637	349,399	75.35
1986	11,624	59,118.3	4,524,427.4	5,086	389,232	76.53	37,173	176,289.6	13,552,402.8	4,742	364,577	76.88
1987	10,460	53,080.5	2,709,850.0	5,075	259,068	51.05	33,041	157,356.6	9,238,749.5	4,762	279,615	58.72

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry", Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

FREE WORLD TOTAL WELL COMPLETIONS

Area/Country	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	29,467	27,300	28,755	27,602	32,893	39,097	41,455	46,479	48,513	51,263	62,462	80,537	88,101
Canada	3,108	3,175	3,548	4,621	4,227	4,242	6,221	6,197	7,170	7,489	8,813	6,927	6,464
Mexico	502	516	431	422	408	353	336	307	406	333	434	412	336
Total North America	33,077	30,991	32,734	32,645	37,528	43.692	48,012	52,938	56,089	59,085	71.709	87,876	94,901
Argentina	579	595	623	597	606	552	646	647	865	773	953	904	822
Brazil	177	175	179	128	176	228	288	245	256	385	463	668	1,045
Ecuador	37	81	59	58	37	15	19	16	16	40	23	27	27
Peru	135	121	117	89	152	161	150	160	157	451	540	426	149
Trinidad-Tobago	135	220	196	212	200	189	192	217	215	188	218	243	200
Venezuela	589	464	371	427	416	284	337	446	637	1,030	1,275	1,491	1,500
Other	177	189	158	127	140	128	156	194	183	289	326	380	357
Total Latin America	1,829	1,845	1,703	1,638	1,727	1,557	1,788	1,925	2,329	3,156	3,798	4,139	4,100
Total Western Hemisphere	34,906	32,836	34,437	34,283	39,255	45,249	49,800	54,908	58,418	62,241	75,507	92,015	99,001
Total North Sea	88	100	107	113	176	207	210	166	134	227	273	283	283
Other European	274	318	352	287	313	369	345	410	525	448	758	810	777
Total Europe	362	418	459	400	489	576	555	576	659	675	1,031	1,093	1,060
Algeria	115	109	80	83	79	107	54	130	60	267	249	159	0
Gabon	26	36	36	44	59	49	44	31	35	38	40	61	56
Libya	250	87	77	74	79	66	64	109	177	184	192	157	110
Nigeria	168	207	258	239	249	192	143	118	104	116	132	202	144
Other	150	214	194	157	162	191	130	208	208	236	257	369	461
Total Africa	709	653	645	597	628	605	435	596	584	841	870	948	771
Abu Dhabi(1)	7	19	37	37	64	49	82	67	78	89	123	146	169
Dubai(1)	0	7	16	18	17	17	30	31	12	7	13	11	23
Sharjah(1)	0	2	2	2	3	2	1	0	0	-	2	4	1
Iran	44	104	61	81	100	140	182	185	180	0	-	-	-
Iraq	6	17	0	16	2	0	2	NA	NA	66	67	-	-
Kuwait(2)	13	8	2	0	0	0	8	0	0	12	36	5	8
Saudi Arabia(2)	43	56	178	323	300	210	163	180	145	144	223	229	25
Neutral Zone(2)	23	12	9	13	19	14	15	4	0	3	4	5	6
Qatar	7	10	8	9	2	7	4	2	2	46	53	51	52
Oman	27	0	56	49	40	55	42	51	61	102	89	110	159
Other	72	58	56	61	83	102	75	124	107	143	207	210	128
Total Middle East	242	293	425	609	630	596	604	644	585	621	817	771	571
Indonesia	84	422	312	501	630	588	513	409	536	473	635	727	323
Other	162	157	223	197	180	157	229	295	440(4)	2,492	3,443	3,539	592
Total Far East	246	579	535	698	810	745	742	704	976	2,965	4,078	4,266	915
Total Eastern Hemisphere	1,559	1,943	2,064	2,304	2,557	2,522	2,336	2,520	2,804	5,102	6,796	7,078	3,317
TOTAL FREE WORLD	36,465	34,779	36,501	36,587	41,812	47,771	52,136	57,428	61,222	67,343	82,303	99,093	102,318

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(1) Member of United Arab Emirates.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(3) Less than one-tenth of one percent.
NA Not Available.

Source: United States, American Association of Petroleum Geologists and American Petroleum Institute
Rest of Free World, Oil and Gas Journal

FREE WORLD TOTAL WELL COMPLETIONS

Area/Country	1983	1984	1985
United States	75,738	84,983	70,708
Canada	7,095	8,765	12,564
Mexico	65	268	297
Total North America	82,898	94,016	83,569
Argentina	130	126	1,024
Brazil	1,145	963	1,074
Ecuador	10	25	22
Peru	23	150	160
Trinidad-Tobago	11	151	197
Venezuela	19	406	361
Other	49	241	299
Total Latin America	1,387	2,062	3,137
Total Western Hemisphere	84,285	96,078	86,706
Total North Sea	402	141	462
Other European	665	648	817
Total Europe	1,067	789	1,279
Algeria	32	NA	NA
Gabon	62	43	46
Libya	--	99	NA
Nigeria	124	89	62
Other	475	450	401
Total Africa	693	NA	NA
United Arab Emirates	34	143	NA
Iran	--	--	NA
Iraq	--	--	NA
Kuwait(1)	--	11	NA
Saudi Arabia(1)	--	--	NA
Neutral Zone(1)	--	--	NA
Qatar	--	8	NA
Oman	38	46	NA
Other	39	62	NA
Total Middle East	111	270	NA
Indonesia	969	756	658
Other	384	1,219	6,684(2)
Total Far East	1,353	1,975	7,340
Total Eastern Hemisphere	3,224	NA	NA
TOTAL FREE WORLD	87,509	NA	NA

(1) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(2) Includes 5,555 wells in China.

Source: United States--American Petroleum Institute, Quarterly Completion Report
Rest of World--American Association of Petroleum Geologists

Section III
Table 13

FREE WORLD TOTAL EXPLORATORY WELL COMPLETIONS

Area/Country	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	7,693	6,922	7,539	7,466	8,619	9,214	9,234	9,961	10,677	10,484	11,916	15,168	16,482
Canada	1,537	1,534	1,633	2,219	1,735	1,649	2,481	2,801	3,144	2,925	3,857	3,074	2,346
Mexico	130	129	143	104	98	87	79	79	83	NA	85	63	65
Total North America	9,360	8,585	9,315	9,789	10,452	10,950	11,794	12,841	13,904	NA	15,858	18,305	18,893
Argentina	113	157	110	139	117	78	83	143	81	NA	110	127	107
Brazil	100	87	80	78	86	87	105	155	89	NA	166	245	328
Ecuador	20	15	20	8	5	3	3	5	3	NA	0	3	5
Peru	28	21	25	31	43	43	36	37	28	NA	13	17	12
Trinidad-Tobago	23	35	23	15	13	14	23	17	8	NA	51	16	23
Venezuela	90	44	64	63	76	35	45	48	60	NA	69	351	250
Other	70	60	77	50	65	61	67	56	60	NA	NA	211	150
Total Latin America	444	419	399	384	405	321	362	406	329	NA	409	970	879
Total Western Hemisphere	9,804	9,004	9,714	10,173	10,857	11,271	12,156	13,247	14,233	NA	16,267	19,275	19,772
Total North Sea	66	53	51	70	92	124	109	21	38	168	NA	135	201
Other European	93	146	159	147	151	172	163	231	259	157	NA	372	398
Total Europe	159	199	210	217	243	296	272	252	297	325	NA	507	599
Algeria	37	25	10	13	9	17	11	11	3	3	2	1	1
Gabon	13	11	17	15	13	23	19	19	20	22	15	23	16
Libya	51	41	34	25	32	36	22	33	41	30	35	43	34
Nigeria	31	55	61	45	51	33	21	24	35	22	31	26	30
Other	131	125	101	80	86	91	89	117	102	133	124	191	216
Total Africa	263	257	223	178	191	200	162	204	201	204	207	284	297
Abu Dhabi(1)	7	8	21	7	3	0	9	5	19	NA	6	NA	22
Dubai(1)	0	0	0	1	0	0	5	9	5	NA	2	NA	3
Sharjah(1)	0	2	1	0	0	0	1	0	0	NA	2	NA	1
Iran	11	6	2	18	27	26	26	25	10	NA	0	NA	0
Iraq	1	0	0	3	2	0	2	NA	NA	NA	0	NA	0
Kuwait(2)	1	2	0	0	0	0	2	0	0	NA	2	NA	8
Saudi Arabia(2)	2	2	6	3	4	9	24	4	25	NA	40	NA	25
Neutral Zone(2)	0	0	0	0	0	0	0	0	0	NA	0	NA	2
Qatar	2	1	6	1	0	0	0	0	0	NA	3	NA	4
Oman	2	0	16	0	0	0	0	10	24	NA	15	NA	31
Other	46	27	29	32	34	65	51	46	39	NA	18	NA	71
Total Middle East	72	48	81	65	70	100	120	99	122	NA	88	NA	167
Indonesia	84	135	137	169	176	186	130	115	146	NA	182	NA	167
Other	162	126	175	173	162	127	119	132	249(3)	NA	221	NA	297
Total Far East	246	261	312	342	338	313	249	247	395	377	403	125	464
Total Eastern Hemisphere	740	765	826	802	842	909	803	802	1,015	NA	698	916	1,527
TOTAL FREE WORLD	10,544	9,769	10,540	10,975	11,699	12,180	12,959	14,049	15,248	14,315	16,695	20,191	21,299

(1) Member of United Arab Emirates.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(3) Includes Oceania.
NA Not Available.
NOTE: Complete data for 1979 through 1981 is not available for all areas.

Source: United States, American Association of Petroleum Geologists and American Petroleum Institute
Rest of Free World, Oil and Gas Journal

FREE WORLD TOTAL EXPLORATORY WELL COMPLETIONS

Area/Country	1983	1984	1985
United States	13,845	15,138	12,430
Canada	2,041	2,863	3,404
Mexico	65	44	78
Total North America	15,951	18,045	15,912
Argentina	130	136	161
Brazil	262	243	229
Ecuador	10	3	2
Peru	23	29	13
Trinidad-Tobago	11	4	14
Venezuela	19	18	6
Other	49	66	111
Total Latin America	504	499	536
Total Western Hemisphere	16,455	18,544	16,448
Total North Sea	220	79	254
Other European	308	317	362
Total Europe	528	396	616
Algeria	2	3	25
Gabon	11	18	13
Libya	--	51	45
Nigeria	24	12	17
Other	167	124	184
Total Africa	204	208	284
United Arab Emirates	34	17	NA
Iran	--	--	NA
Iraq	--	--	NA
Kuwait(1)	--	11	NA
Saudi Arabia(1)	--	--	NA
Neutral Zone(1)	--	--	NA
Qatar	--	3	NA
Oman	38	29	NA
Other	39	50	NA
Total Middle East	111	110	NA
Indonesia	NA	216	208
Other(2)	NA	468	256
Total Far East	NA	684	464
Total Eastern Hemisphere	NA	1,398	NA
TOTAL FREE WORLD	NA	19,942	NA

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(1) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(2) Includes Oceania.
NA=Not Available

Source: United States--American Petroleum Institute, Quarterly Completion Report
Rest of Free World--American Association of Petroleum Geologists

Section III
Table 14

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Alabama	2	4	5	9	8	3	2	8	8	7	7	4	5	6
Alaska	0	0	0	0	0	0	0	0	0	0	0	5	9	9
Arkansas	18	17	17	19	26	20	16	17	23	20	14	12	14	13
Arizona	0	0	1	1	1	1	1	1	1	1	1	0	1	1
California	173	134	157	165	169	138	143	119	97	80	93	80	82	97
Colorado	9	11	25	34	43	66	75	60	47	36	43	35	27	30
Florida	7	2	1	3	6	3	2	1	1	1	0	2	1	1
Georgia	0	0	0	2	1	0	0	0	0	0	0	1	1	0
Idaho	0	2	0	2	1	0	0	0	0	0	0	0	0	0
Illinois	68	66	61	66	69	80	96	75	49	46	37	37	37	32
Indiana	22	25	23	22	18	8	7	9	6	7	7	8	4	6
Iowa	0	0	0	0	0	1	2	1	2	3	2	0	1	1
Kansas	115	129	165	162	164	157	178	169	155	130	138	112	105	101
Kentucky	6	12	19	17	15	16	12	10	9	6	7	6	5	6
Louisiana	239	231	243	257	280	312	401	442	423	309	332	287	275	261
Maryland	0	0	0	0	0	0	1	0	1	0	1	0	0	0
Michigan	19	14	21	17	18	16	12	12	12	9	26	35	23	15
Mississippi	31	30	39	29	28	32	33	25	34	44	67	61	58	46
Missouri	0	0	0	0	1	0	0	1	1	1	0	1	1	1
Montana	10	8	14	36	41	31	38	38	29	23	22	20	23	27
Nebraska	1	9	15	17	15	24	37	32	32	22	25	23	26	16
Nevada	0	0	0	0	1	2	1	1	0	0	1	0	1	0
New Mexico	48	56	97	149	162	98	117	132	144	109	113	106	102	94
New York	0	0	0	0	0	0	0	1	0	1	1	1	1	2
North Carolina	0	0	0	0	1	0	0	0	0	0	0	0	0	0
North Dakota	0	1	4	24	31	32	23	24	31	33	30	16	15	14
Ohio	0	0	0	0	1	1	2	1	0	2	3	5	7	8
Oklahoma	238	269	302	326	344	330	326	286	243	204	226	179	197	174
Oregon	0	1	0	0	0	1	1	0	0	0	0	1	0	0
Pennsylvania	0	0	0	4	8	10	5	5	12	10	11	10	8	9
South Dakota	0	1	1	1	3	2	2	1	1	1	4	1	1	1
Tennessee	0	0	0	0	0	0	1	0	1	0	0	0	1	0
Texas	922	1,063	1,230	1,173	1,039	1,018	1,059	1,054	951	719	750	604	628	570
Utah	11	4	16	23	15	14	13	21	47	37	32	29	33	29
Virginia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Washington	0	0	0	0	1	0	0	1	1	0	1	1	1	1
West Virginia	0	0	0	0	1	2	1	2	3	4	6	5	9	13
Wyoming	78	65	88	83	102	90	79	71	65	58	74	63	58	53
TOTAL	2,107	2,154	2,544	2,641	2,613	2,508	2,686	2,620	2,429	1,923	2,074	1,750	1,760	1,637

Source: Hughes Tool Company

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

STATE	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	5	2	1	2	2	3	6	7	8	15	13	12	14	17
Alaska	6	5	6	13	21	20	28	14	5	5	5	9	14	14
Arkansas	10	9	11	10	8	7	16	13	15	15	15	18	14	15
Arizona	1	2	1	1	3	1	2	0	1	0	2	1	0	1
California	85	93	89	79	83	87	78	52	46	46	51	72	80	89
Colorado	23	21	19	16	16	17	23	25	30	35	42	46	42	38
Florida	0	1	4	2	2	1	1	4	11	18	9	7	9	5
Georgia	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Idaho	1	0	0	0	0	0	0	1	0	0	1	0	0	1
Illinois	25	20	24	30	30	22	17	14	13	14	6	7	19	22
Indiana	6	6	5	5	3	2	1	1	1	1	0	1	2	0
Iowa	1	0	0	1	0	0	0	0	1	2	1	0	2	0
Kansas	96	87	70	56	41	35	38	30	29	24	28	44	57	51
Kentucky	10	8	12	13	9	5	2	1	2	2	1	2	1	1
Louisiana	265	282	270	256	235	233	230	204	194	215	205	203	228	231
Maryland	0	2	2	4	0	1	1	0	0	1	0	0	0	1
Michigan	14	13	11	9	10	10	10	11	12	17	20	24	28	24
Mississippi	46	39	35	34	33	36	40	43	39	37	29	29	25	32
Missouri	1	0	0	1	0	0	0	0	0	0	1	0	0	0
Montana	22	21	26	24	22	34	31	17	17	20	19	24	27	28
Nebraska	12	11	10	8	5	5	10	6	5	6	5	7	9	8
Nevada	0	1	2	1	1	2	0	0	0	0	0	1	0	2
New Mexico	84	79	65	60	56	68	64	40	47	56	62	79	71	54
New York	1	1	1	1	1	1	0	0	1	0	1	7	8	9
North Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Dakota	9	14	12	12	11	13	12	9	9	7	10	12	17	19
Ohio	12	56	22	14	18	22	22	24	17	22	36	30	21	26
Oklahoma	158	158	163	141	101	106	120	98	90	90	115	146	177	186
Oregon	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Pennsylvania	12	11	9	10	7	5	7	9	9	8	11	14	10	10
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	1	1	2	0	0	1	1	2	1	1	1	1	1	2
Tennessee	0	0	0	1	1	0	1	2	1	0	0	0	0	0
Texas	500	477	425	387	340	329	322	302	291	338	376	508	638	653
Utah	22	17	14	14	15	12	12	12	17	34	38	42	26	19
Virginia	1	1	1	0	0	0	0	1	1	0	1	2	3	0
Washington	1	0	0	1	1	0	0	0	0	0	0	0	0	0
West Virginia	14	16	24	19	15	16	18	16	17	17	20	16	10	12
Wyoming	55	48	50	48	44	75	81	71	45	61	70	107	107	86
TOTAL	1,500	1,502	1,387	1,273	1,134	1,169	1,194	1,028	976	1,107	1,195	1,471	1,660	1,656

Source: Hughes Tool Company

Section III
Table 14b

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	13	13	13	11	17	15	16	15	22	10	11
Alaska	15	16	13	14	23	22	14	14	20	13	6
Arkansas	14	14	10	27	34	27	26	26	24	10	9
Arizona	1	0	0	1	1	1	0	0	0	0	0
California	90	94	96	120	155	129	106	107	80	49	61
Colorado	45	41	40	61	82	60	52	54	50	24	25
Florida	6	6	5	4	8	5	4	4	7	2	3
Georgia	0	0	0	0	1	2	0	0	0	0	0
Hawaii	0	0	0	0	1	0	1	0	0	0	0
Idaho	1	3	2	3	3	2	1	1	1	1	0
Illinois	16	28	13	25	45	76	60	41	28	6	3
Indiana	3	4	0	0	1	7	6	7	4	1	1
Iowa	1	0	0	0	0	0	0	0	0	0	0
Kansas	67	76	66	120	196	157	124	128	91	47	49
Kentucky	2	3	0	0	5	10	8	8	6	3	2
Louisiana	292	338	347	427	456	343	283	310	282	142	135
Maryland	0	1	1	0	1	0	0	0	0	0	0
Michigan	24	24	25	31	36	31	29	34	34	24	22
Mississippi	41	44	40	58	71	42	33	32	31	15	13
Missouri	0	0	0	0	0	0	0	0	0	0	0
Montana	27	30	33	49	81	36	24	36	23	10	9
Nebraska	9	10	9	14	15	9	9	9	6	3	5
Nevada	3	2	4	5	5	3	1	5	5	3	2
New Mexico	69	76	88	118	135	103	65	78	71	29	35
New York	7	7	9	7	12	15	10	9	5	2	2
North Carolina	0	0	0	0	0	0	0	0	0	0	0
North Dakota	24	39	56	83	119	69	43	51	38	13	14
Ohio	33	45	46	75	98	57	39	51	29	18	20
Oklahoma	233	258	247	397	698	622	285	319	251	141	136
Oregon	0	0	1	1	2	1	0	0	0	0	0
Pennsylvania	15	25	29	29	44	33	22	36	30	18	17
Rhode Island	1	4	4	2	2	2	0	0	0	0	0
South Dakota	3	2	1	2	2	2	1	2	2	1	0
Tennessee	0	0	0	1	0	2	1	0	0	0	0
Texas	778	855	770	988	1,316	990	796	850	677	311	293
Utah	30	32	29	42	69	40	37	45	29	11	7
Virginia	1	1	1	1	3	2	2	2	4	(1)	(1)
Washington	0	0	0	0	1	1	1	1	0	(1)	(1)
West Virginia	17	27	30	38	45	49	34	38	26	15	13
Wyoming	120	137	147	156	191	143	96	115	93	35	39
Other										7	3
TOTAL	2,001	2,255	2,176	2,910	3,970	3,105	2,229	2,428	1,969	964	936

(1) Included in other.

Source: Hughes Tool Company

Section III –
Table 15

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1967 Exploratory	1967 Development	1967 Total(1)	1968 Exploratory	1968 Development	1968 Total(1)	1969 Exploratory	1969 Development	1969 Total(1)
Alabama	28	10	38	18	14	32	34	14	48
Alaska	33	41	74	18	86	107	12	51	67
Offshore*	--	--	--	N.A.	N.A.	N.A.	2	44	50
Arizona	14	10	24	6	4	10	24	14	39
Arkansas	87	320	409	111	211	322	131	288	422
California	352	2,182	2,668	353	2,366	2,888	288	1,712	2,167
Offshore*	12	73	101	28	304	367	17	210	262
Colorado	277	262	539	270	224	495	538	276	820
Florida	11	--	11	9	4	13	8	5	13
Georgia	--	--	--	--	--	--	2	--	2
Illinois	328	861	1,339	253	789	1,226	241	639	988
Indiana	254	220	510	158	179	367	178	189	407
Iowa	1	--	25	--	--	22	--	--	7
Kansas	1,270	1,937	3,345	1,186	1,849	3,107	1,058	1,919	3,105
Kentucky	458	1,086	1,647	453	828	1,379	256	696	1,030
Louisiana	935	2,209	3,185	1,026	2,415	3,478	865	2,272	3,174
Offshore*	296	559	867	352	696	1,068	147	678	835
Michigan	173	191	365	174	196	380	164	168	348
Minnesota	--	--	--	--	--	1	--	--	--
Mississippi	347	368	722	382	297	688	373	342	716
Missouri	4	--	19	4	12	38	7	22	57
Montana	302	252	580	465	400	882	499	296	834
Nebraska	95	84	179	196	89	288	285	98	388
Nevada	7	2	9	--	--	--	14	2	16
New Mexico	166	925	1,118	154	743	925	190	984	1,219
New York	35	176	238	9	97	120	6	128	166
North Carolina	--	--	--	--	--	--	--	--	--
North Dakota	60	93	156	121	62	186	178	74	252
Ohio	75	1,186	1,267	79	1,084	1,165	53	1,185	1,255
Oklahoma	421	2,431	3,074	422	2,318	2,996	546	2,567	3,395
Oregon	1	--	1	--	--	--	--	--	--
Offshore*	1	--	1	--	--	--	--	--	--
Pennsylvania	59	564	683	62	733	897	43	853	1,018
South Dakota	4	--	4	4	--	4	56	--	56
Tennessee	47	--	47	25	1	26	23	3	27
Texas	2,508	6,628	9,576	2,207	5,407	8,743	2,718	5,938	9,233
Offshore*	61	41	102	40	13	53	103	11	114
Utah	67	75	144	41	58	99	103	71	175
Vermont	--	--	--	--	--	--	1	--	1
Virginia	--	--	--	--	--	--	8	2	10
Washington	3	--	3	2	--	2	--	--	--
Offshore*	1	--	1	--	--	--	--	--	--
West Virginia	36	738	777	87	646	735	83	819	920
Wyoming	420	505	1,042	584	608	1,293	716	859	1,678
Total	8,878	23,356	33,818	8,879	21,720	32,914	9,701	22,486	34,053

* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

(3) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed, regardless of the time frame in which they were reported to the API.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15a

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1970(3)			1971			1972		
	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	30	16	46	55	21	79	87	32	119
Alaska	30	45	77	5	28	33	12	13	30
Offshore*	1	16	19	--	1	1	--	4	7
Arizona	9	3	13	10	4	15	13	10	23
Arkansas	87	230	328	93	235	351	98	240	344
California	243	1,791	2,316	221	1,591	2,095	193	1,202	1,674
Offshore*	15	117	144	15	56	76	4	55	80
Colorado	461	249	710	605	385	990	473	501	975
Florida	13	16	29	18	22	42	39	67	109
Georgia	3	--	3	1	--	1	2	--	2
Idaho	--	--	--	--	--	--	1	--	1
Illinois	198	482	753	152	406	622	157	453	655
Indiana	149	143	307	110	101	228	130	138	284
Iowa	3	--	5	1	--	1	--	--	--
Kansas	882	1,642	2,574	735	1,603	2,398	773	1,645	2,498
Kentucky	234	594	892	213	557	829	217	541	817
Louisiana	669	2,376	3,084	830	2,198	3,078	731	2,481	3,244
Offshore*	150	788	953	274	564	861	200	797	1,008
Maryland	--	--	--	--	--	--	1	--	1
Michigan	152	126	281	162	141	306	182	127	317
Mississippi	232	310	563	213	287	524	237	184	455
Missouri	4	10	15	7	7	15	3	--	4
Montana	307	148	473	323	134	485	430	287	733
Nebraska	167	83	251	130	83	215	185	90	275
Nevada	2	--	9	6	--	6	2	--	2
New Mexico	159	580	774	158	696	867	200	864	1,093
New York	11	88	110	10	90	129	14	115	144
North Carolina	--	--	--	12	--	12	2	--	2
North Dakota	87	57	145	98	60	158	60	33	94
Ohio	85	1,310	1,346	41	1,210	1,256	64	1,484	1,548
Oklahoma	452	2,135	2,783	430	1,815	2,444	400	1,888	2,502
Oregon	--	--	--	2	--	2	--	--	--
Pennsylvania	43	664	759	21	719	786	83	946	1,100
South Dakota	64	1	65	24	8	32	18	1	19
Tennessee	50	48	98	113	57	170	68	27	95
Texas	2,022	5,681	8,130	1,848	5,427	7,737	2,077	5,839	8,365
Offshore*	49	8	57	31	7	38	52	6	58
Utah	46	40	87	61	36	98	77	76	153
Virginia	--	--	--	--	7	7	1	15	16
Washington	--	--	12	--	--	--	--	--	--
West Virginia	88	998	1,111	66	696	768	89	576	669
Wyoming	504	872	1,393	357	513	903	432	508	1,058
Total	7,436	20,737	29,542	7,131	19,137	27,682	7,551	20,383	29,420

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* Included in state total.
(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15b

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1973			1974			1975		
	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	72	39	111	48	38	86	76	53	130
Alaska	13	19	33	12	27	39	24	41	69
Offshore*	3	6	10	--	11	11	1	13	14
Arizona	2	8	10	1	1	2	1	--	2
Arkansas	79	206	292	91	231	325	77	245	330
California	202	1,073	1,393	253	1,915	2,397	213	2,028	2,694
Offshore*	2	50	65	5	67	79	5	56	66
Colorado	462	478	945	374	537	919	405	762	1,172
Florida	34	23	60	28	11	40	34	17	52
Georgia	4	--	4	5	--	5	3	--	3
Idaho	5	--	5	2	--	2	1	--	1
Illinois	213	386	656	225	577	855	258	764	1,129
Indiana	139	100	259	168	208	389	156	217	400
Iowa	--	--	--	2	--	2	--	--	--
Kansas	754	1,416	2,244	855	1,913	2,960	909	2,444	3,728
Kentucky	165	458	652	197	508	759	341	631	1,013
Louisiana	678	2,015	2,719	652	2,120	2,833	722	2,322	3,105
Offshore*	202	548	760	149	452	620	147	525	679
Maryland	--	--	1	1	--	1	1	--	3
Michigan	191	113	307	264	165	441	282	249	536
Mississippi	209	145	367	288	148	440	260	183	454
Missouri	11	2	13	20	7	96	19	6	95
Montana	448	233	685	420	369	792	355	503	858
Nebraska	102	67	176	167	91	263	206	133	347
Nevada	--	--	--	2	--	2	5	--	5
New Mexico	191	849	1,083	215	963	1,193	162	974	1,173
New York	21	177	222	53	264	373	35	538	610
North Carolina	7	--	7	3	--	3	1	--	1
North Dakota	71	51	129	76	68	145	105	100	205
Ohio	160	1,563	1,724	134	1,414	1,552	157	1,400	1,558
Oklahoma	353	2,000	2,470	399	2,846	3,386	411	3,404	3,960
Pennsylvania	94	1,151	1,299	124	1,303	1,559	88	1,116	1,270
South Dakota	16	1	17	11	2	17	24	3	27
Tennessee	68	29	99	117	64	181	169	63	232
Texas	2,416	5,906	8,656	3,141	6,881	10,321	3,291	9,588	13,276
Offshore*	69	11	80	157	8	166	150	15	166
Utah	77	131	208	55	153	211	64	129	196
Virginia	4	17	20	8	37	45	8	28	36
West Virginia	109	749	858	81	657	741	95	661	772
Wyoming	102	516	938	463	550	1,026	473	822	1,327
N. Gulf of Mexico(2)	--	--	--	14	--	14	33	1	34
Total	7,771	19,921	28,662	8,969	24,068	34,515	9,459	27,425	40,804

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* Included in state total.
(1) Includes service wells, stratigraphic and core tests.
(2) Northern Gulf of Mexico was a new area designated in 1972 by the Bureau of Land Management for federally controlled Outer Continental Shelf Waters not previously mapped or leased.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15c

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

	1976			1977			1978		
STATE/AREA	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	54	62	116	47	88	136	60	101	161
Alaska	6	54	77	21	48	73	12	55	76
Offshore*	---	13	18	3	12	19	2	7	11
Arizona	2	--	2	2	2	4	--	8	8
Arkansas	80	348	438	82	399	491	95	347	450
Atlantic Coast	--	--	--	--	--	1	7	--	7
California	257	2,161	2,808	275	1,938	2,553	359	1,639	2,485
Offshore*	7	21	28	17	39	63	15	65	85
Colorado	389	762	1,152	392	791	1,212	449	701	1,156
Florida	9	16	26	14	15	32	15	11	29
Georgia	3	--	3	--	--	--	1	--	1
Idaho	2	--	2	1	--	1	7	--	7
Illinois	226	1,058	1,484	238	851	1,143	277	855	1,202
Indiana	196	291	509	276	337	621	268	401	685
Iowa	--	--	--	1	--	1	--	--	--
Kansas	893	2,646	3,705	1,043	2,899	4,060	1,181	3,312	4,576
Kentucky	425	742	1,189	368	688	1,075	353	657	1,077
Louisiana	607	2,719	3,373	640	2,753	3,439	782	3,001	3,817
Offshore*	94	473	572	138	634	785	121	594	723
Maryland	--	2	3	--	--	3	--	--	3
Mass.-Offshore	--	--	1	--	--	--	--	--	--
Michigan	294	213	530	297	243	545	267	257	539
Mississippi	265	233	504	272	255	539	241	248	496
Missouri	9	13	44	8	4	53	6	26	49
Montana	362	409	773	273	400	679	324	453	778
Nebraska	193	119	312	235	186	425	265	183	451
Nevada	8	--	8	12	6	18	14	7	22
New Jersey	--	--	1	--	--	--	--	--	--
New Mexico	162	859	1,042	180	1,210	1,407	205	1,375	1,625
New York	40	419	519	49	345	485	45	330	427
North Carolina	--	--	1	--	--	--	--	--	--
North Dakota	122	122	245	111	131	242	162	178	341
Ohio	133	2,071	2,205	81	2,685	2,768	77	3,254	3,333
Oklahoma	452	4,104	4,741	490	4,821	5,344	495	5,641	6,164
Oregon	--	--	--	2	--	2	--	--	--
Pennsylvania	67	1,212	1,316	116	1,433	1,569	94	2,013	2,182
South Dakota	29	6	36	20	23	43	21	29	50
Tennessee	153	46	199	177	110	287	149	115	264
Texas	3,276	9,335	12,982	3,726	10,898	15,114	4,085	11,260	15,863
Offshore*	174	130	304	131	180	311	160	147	307
Utah	41	87	131	103	184	305	80	186	268
Virginia	3	8	11	9	16	25	5	26	31
Washington	3	--	3	--	--	--	--	--	--
West Virginia	114	875	1,035	115	1,112	1,267	151	1,352	1,537
Wyoming	415	630	1,059	440	827	1,281	470	996	1,489
N. Gulf of Mexico(2)	27	1	28	17	17	34	4	14	18
TOTAL	9,317	31,623	42,614	10,140	35,715	47,308	11,030	39,031	51,671

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* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

(2) Northern Gulf of Mexico was a new area designated in 1972 by the Bureau of Land Management for federally controlled Outer Continental Shelf Waters not previously mapped or leased.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15d

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1979			1980			1981		
	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	101	118	219	77	119	196	75	142	222
Alaska	14	71	96	16	108	125	20	146	172
Offshore*	2	5	8	--	5	6	--	4	5
Arizona	2	1	4	6	--	6	8	5	14
Arkansas	105	393	504	111	496	612	154	723	889
Atlantic Coast(2)	18	--	18	4	--	4	5	--	5
California	395	1,592	2,340	443	2,072	3,039	538	2,593	3,838
Offshore*	8	85	123	7	77	137	7	148	193
Colorado	456	607	1,069	553	857	1,414	849	1,122	1,977
Florida	11	20	32	8	11	21	10	15	25
Georgia	--	--	--	1	--	1	2	--	2
Idaho	3	--	3	5	--	5	5	--	5
Illinois	284	967	1,327	487	1,828	2,482	736	2,550	3,436
Indiana	183	302	494	327	406	751	347	460	828
Kansas	1,022	3,338	4,436	1,237	4,923	6,266	1,848	6,452	8,551
Kentucky	423	709	1,195	619	1,463	2,171	870	2,030	3,062
Louisiana	665	3,358	4,063	808	4,223	5,147	971	4,362	5,503
Offshore*	123	598	723	146	493	644	176	503	680
Maryland	--	--	--	1	--	1	1	--	1
Michigan	255	264	538	316	345	676	402	362	787
Mississippi	242	281	534	310	360	680	357	431	788
Missouri	15	56	85	22	143	266	78	189	397
Montana	349	471	822	382	507	902	521	744	1,289
Nebraska	265	184	450	252	260	514	279	327	608
Nevada	11	--	12	20	1	21	28	2	34
New Mexico	212	1,396	1,656	273	1,793	2,126	358	2,099	2,527
New York	60	437	513	59	436	507	79	492	578
North Carolina	--	--	--	--	--	--	--	--	--
North Dakota	175	265	440	256	360	619	461	417	879
Ohio	114	3,532	3,657	66	5,023	5,093	151	5,926	6,082
Oklahoma	479	6,477	6,980	554	9,568	10,158	733	12,357	13,125
Oregon	17	4	21	32	9	41	20	--	20
Offshore*	--	--	--	--	--	--	--	--	--
Pennsylvania	105	2,068	2,295	255	2,833	3,261	342	3,517	3,962
South Dakota	32	17	49	33	41	75	47	43	90
Tennessee	163	185	348	293	257	550	333	295	628
Texas	3,910	11,4[illegible]	15,810	4,354	15,172	20,038	5,688	20,291	26,442
Offshore*	123	87	210	113	132	245	125	114	239
Utah	89	187	284	112	177	291	208	347	555
Virginia	4	21	25	2	25	27	6	26	32
Washington	--	--	6	2	--	3	--	--	--
Offshore*	--	--	--	--	--	--	--	--	--
West Virginia	124	1,445	1,612	119	1,752	1,924	170	1,948	2,170
Wyoming	411	963	1,392	435	1,037	1,518	708	1,289	2,043
N. Gulf of Mexico.	18	12	30	16	11	27	22	12	34
Alaska(2)	3	--	3	4	--	4	--	--	--
Pacific Coast(2)	--	--	--	--	--	--	--	--	--
Total	10,735	41,155	53,362	12,870	56,616	71,562	17,430	71,804	91,600

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* Included in state total
(1) Includes service wells, stratigraphic and core tests.
(2) Alaska (offshore federal waters), Atlantic Coast and Pacific Coast were mapped and released by the Bureau of Land Management as of January 1, 1979.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1982 Exploratory	1982 Development	1982 Total(1)	1983 Exploratory	1983 Development	1983 Total(1)	1984 Exploratory	1984 Development	1984 Total(1)
Alabama	79	133	214	84	132	217	121	262	383
Alaska	10	200	227	3	157	163	10	165	186
Offshore*	--	8	11	0	6	6	0	2	2
Arizona	7	1	14	11	1	12	2	0	2
Arkansas	128	680	825	154	723	900	133	739	897
Atlantic Coast(3)	7	--	7	1	0	1	3	0	3
California	468	2,107	3,097	195	2,143	2,733	204	3,276	3,898
Offshore*	16	175	231	16	77	103	13	104	132
Colorado	653	1,173	1,832	504	978	1,484	579	1,221	1,806
Florida	12	9	21	13	7	20	12	12	24
Georgia	1	--	1	0	0	0	3	0	3
Idaho	6	--	6	4	0	4	3	0	3
Illinois	695	2,433	3,253	729	2,181	3,035	699	2,194	2,941
Indiana	451	571	1,051	453	534	1,022	404	523	990
Kansas	1,838	6,491	8,561	1,718	5,342	7,256	2,346	4,088	6,550
Kentucky	1,119	2,583	3,804	1,375	2,721	4,232	972	2,781	3,844
Louisiana	801	4,244	5,117	592	4,359	5,048	763	6,001	6,891
Offshore*	157	432	589	114	685	801	197	704	901
Maryland	0	0	0	0	0	0	2	0	2
Michigan	449	435	900	302	457	772	536	568	1,121
Mississippi	268	316	584	252	298	550	282	332	615
Missouri	79	104	305	43	133	243	28	85	260
Montana	275	536	816	181	326	511	251	557	820
Nebraska	197	212	414	187	181	369	180	186	377
Nevada	11	--	13	7	1	8	32	5	37
New Mexico	314	1,733	2,100	192	1,301	1,527	225	1,398	1,668
New York	44	623	668	41	370	413	30	579	609
North Carolina	0	0	0	1	0	1	1	0	1
North Dakota	371	325	696	211	278	489	279	421	700
Ohio	180	4,618	4,814	114	4,150	4,288	108	4,818	4,958
Oklahoma	707	10,660	11,390	567	8,340	8,943	515	8,990	9,579
Oregon	8	0	8	0	0	0	1	0	1
Offshore*	0	0	0	0	0	0	0	0	0
Pennsylvania	165	3,168	3,399	92	2,324	2,465	102	3,358	3,533
South Carolina	0	0	0	0	0	0	1	0	1
South Dakota	33	20	53	34	18	52	16	28	44
Tennessee	413	214	627	328	189	517	164	202	366
Texas	5,077	19,707	25,439	4,525	18,897	24,089	5,111	21,810	27,696
Offshore*	141	99	240	109	53	162	111	78	189
Utah	149	313	482	132	283	415	112	380	493
Virginia	26	71	97	14	21	35	3	64	67
Washington	5	0	8	1	0	5	1	0	7
Offshore*	0	0	0	0	0	0	0	0	0
West Virginia	156	1,921	2,114	60	1,536	1,619	37	1,846	1,919
Wyoming	537	1,124	1,719	473	997	1,508	607	1,142	1,804
N. Gulf of Mexico(2)	22	26	48	13	42	55	57	26	83
Pacific Coast(3)	4	0	4	22	0	22	12	0	12
Alaska(3)	1	0	1	0	0	0	2	0	2
Total	15,766	66,751	84,729	13,627	59,421	75,032	14,949	68,057	85,196

* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute, Quarterly Completion Reports.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1985 Exploratory	1985 Development	1985 Total(1)	1986 Exploratory	1986 Development	1986 Total(1)	1987 Exploratory	1987 Development	1987 Total(1)
Alabama	143	217	360	78	140	218	64	112	176
Alaska	5	98	104	1	173	178	3	64	68
Offshore*	0	6	6	0	8	8	0	1	1
Arizona	2	1	3	5	0	5	4	0	4
Arkansas	122	875	1,018	84	399	483	77	276	353
California	201	3,122	3,599	124	1,921	2,082	134	1,878	2,020
Offshore*	4	84	92	0	42	42	6	26	32
Colorado	563	966	1,551	282	741	1,025	195	488	687
Florida	10	11	21	6	8	14	4	5	9
Georgia	1	0	1	2	0	2	0	0	0
Idaho	3	0	3	4	0	4	0	0	0
Illinois	537	1,840	2,381	285	987	1,286	195	869	1,137
Indiana	403	540	972	139	267	424	108	139	255
Iowa	1	0	1	3	0	3	1	0	1
Kansas	1,503	3,986	5,584	1,099	1,968	3,074	1,105	1,375	2,486
Kentucky	635	1,976	2,643	187	743	934	85	299	391
Louisiana	621	4,754	5,450	412	2,194	2,610	311	1,662	1,973
Offshore*	165	481	647	133	306	442	106	217	323
Maryland	0	0	0	1	0	1	1	0	1
Michigan	454	394	863	257	247	512	238	192	433
Mississippi	260	312	572	109	184	294	112	180	292
Missouri	15	62	84	5	5	10	4	4	8
Montana	222	385	609	142	202	344	82	155	239
Nebraska	160	114	277	85	55	154	106	46	155
Nevada	25	9	34	18	0	18	12	2	14
New Mexico	288	1,434	1,743	157	759	932	139	519	672
New York	18	418	436	7	219	226	3	74	77
North Dakota	219	278	497	126	92	218	74	64	138
Ohio	84	3,652	3,743	30	1,803	1,841	17	883	900
Oklahoma	406	7,133	7,617	213	4,154	4,398	188	2,612	2,830
Oregon	3	2	5	8	2	10	6	4	10
Offshore*	0	0	0	0	0	0	0	0	0
Pennsylvania	60	2,718	2,806	18	1,001	1,019	7	360	367
South Dakota	16	31	49	17	0	17	4	2	6
Tennessee	117	120	237	55	107	162	23	72	95
Texas	4,174	19,225	24,291	2,500	10,183	13,146	1,952	7,267	9,491
Offshore*	118	98	216	43	40	83	42	29	71
Utah	54	302	359	37	159	198	34	55	90
Virginia	3	85	88	7	131	138	1	9	10
Washington	2	2	4	0	0	0	1	0	1
West Virginia	35	1,393	1,432	9	835	844	11	528	539
Wyoming	552	918	1,533	360	444	817	276	305	589
N. Gulf of Mexico	95	29	124	58	39	97	32	23	55
Pacific Coast	4	0	4	4	4	8	0	6	6
Alaska	10	0	10	3	2	5	0	1	1
TOTAL	12,026	57,402	71,108	6,937	30,168	37,751	5,610	20,530	26,580

* Included in state total.
(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1987.

U.S. ROTARY RIG CENSUS

Year	Number of Rigs	Contractor Owned	Oil Company Owned	Stacked	Active	DRILLING DEPTH CAPABILITIES (Thousand Feet) 0-5	6-9	10-12	13-15	16-Over	Total Land Rigs	Drilling Barges	Offshore Rigs
1967(1)	2,408	2,359	49	835	1,573	623	776	435	199	375	2,114	121	173
1968	2,111	2,067	44	603	1,508	493	680	381	185	372	1,825	114	172
1969	2,060	2,033	27	411	1,649	528	626	352	188	366	1,827	98	135
1970	1,898	1,869	29	567	1,331	434	580	322	219	343	1,662	106	130
1971	1,859	1,832	27	551	1,308	436	535	329	198	361	1,592	124	143
1972	1,768	1,741	27	387	1,381	409	490	301	171	397	1,551	77	140
1973	1,767	1,739	28	294	1,473	355	517	318	164	413	1,570	71	126
1974	1,894	1,881	13	125	1,769	387	529	339	214	425	1,715	66	113
1975	2,028	2,015	14	151	1,877	396	579	270	225	558	1,839	74	115
1976	2,204	2,180	24	225	1,979	468	633	366	239	498	1,964	76	164
1977	2,482	2,451	31	83	2,399	542	628	451	274	577	2,186	77	219
1978	2,851	2,818	33	66	2,785	557	723	565	313	693	2,524	91	236
1979	3,182	3,144	38	308	2,874	546	783	631	350	872	2,802	109	271
1980	3,672	3,626	46	130	3,542	605	885	704	419	1,059	3,255	115	302
1981	4,803	4,762	41	100	4,703	773	1,080	950	595	1,405	4,316	161	326
1982	5,644	5,606	38	2,419	3,225	821	1,285	1,104	717	1,717	5,139	157	348
1983	5,273	5,241	32	2,734	2,539	746	1,233	993	662	1,639	4,832	128	313
1984	4,580	4,553	27	1,490	3,090	571	1,077	933	591	1,408	4,102	131	347
1985	4,409	4,386	23	1,784	2,625	529	1,084	894	570	1,332	3,940	121	348
1986	3,993	3,961	32	2,941	1,052	517	971	789	496	1,220	3,573	90	330
1987	3,331	3,299	32	1,943	1,388	435	841	637	427	991	2,956	91	284

(1) Data for prior years not available on a comparable basis.

Source: Reed Tool Company, Annual Rotary Rig Census (taken in August of each year and published in the October issue of World Oil Magazine).

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	--	--	--	--	--	--	--	--	--	--	--	--	4	4
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	2	2
Arizona	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Arkansas	160	165	168	179	190	200	230	240	240	255	260	300	320	370
California	350	365	395	440	360	380	420	460	470	465	500	535	569	652
Colorado	20	30	30	36	35	40	55	75	100	150	240	250	318	466
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	100	100	100	90	50	40	25	25	30	40	40	35	35	45
Indiana	830	800	750	750	650	600	450	425	400	405	410	380	350	350
Kansas	2,700	3,000	3,300	3,700	4,000	4,270	4,600	4,800	5,100	5,450	5,650	6,000	5,700	6,003
Kentucky	3,350	3,480	3,610	3,500	3,570	3,800	3,900	4,000	4,100	4,200	4,300	4,330	4,690	4,829
Louisiana	2,100	2,210	2,400	2,550	2,690	2,900	3,200	3,500	3,600	4,000	4,300	4,500	5,000	6,479
Maryland	--	--	--	--	--	--	--	--	--	--	--	--	38	38
Michigan	760	700	650	550	400	380	280	250	260	260	270	270	230	154
Mississippi	60	75	75	140	190	220	220	235	230	235	238	250	300	400
Missouri	100	100	90	59	30	20	27	37	32	33	38	40	--	9
Montana	700	760	800	820	830	920	1,000	1,050	1,060	1,065	1,090	1,090	1,176	999
Nebraska	--	--	--	--	--	--	--	--	--	--	--	--	50	53
New Mexico	220	230	270	360	570	920	1,500	1,800	2,200	2,830	3,300	4,000	5,000	6,047
New York	1,700	1,600	1,400	1,400	1,380	1,360	1,300	1,250	1,180	1,160	1,150	980	920	1,000
North Dakota	--	--	--	--	--	--	--	--	--	--	--	--	28	28
Ohio	7,190	7,000	6,700	6,800	6,300	6,000	6,100	6,100	6,200	6,300	6,450	6,300	6,700	7,063
Oklahoma	3,250	3,400	3,500	3,600	3,600	3,700	3,900	4,000	4,200	4,300	4,450	5,000	5,300	5,800
Pennsylvania	19,100	18,800	18,400	18,500	17,700	16,700	16,700	16,500	16,300	16,250	16,300	16,300	16,500	16,350
South Dakota	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tennessee(1)	--	18	18	18	20	20	27	28	28	28	30	30	25	30
Texas	5,000	5,100	5,800	7,300	8,300	9,200	10,200	11,200	11,400	12,240	13,400	15,340	16,750	18,612
Utah	--	--	--	--	--	--	--	--	--	--	--	--	37	35
Virginia	--	--	--	--	--	--	--	--	--	--	--	--	53	92
West Virginia	15,800	16,100	15,500	13,900	14,000	13,500	13,800	13,900	14,000	14,200	14,200	14,000	12,740	14,500
Wyoming	150	145	150	165	165	180	180	200	220	265	280	300	390	350
Other	30	34	40	43	70	100	109	117	125	130	145	170	--	--
Total	63,670	64,212	64,146	64,900	65,100	65,450	68,233	70,192	71,475	74,261	77,041	80,400	83,225	90,761

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(1) Prior to 1948 included with Kentucky.

Source: U.S. Bureau of Mines, Natural Gas Annuals—

Section III
Table 17a

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Alabama	--	--	2	--	--	--	--	1	1	2	--	15	15	6
Alaska	5	8	10	13	11	19	21	18	44	51	40	50	52	52
Arizona	--	3	7	10	8	9	7	4	4	4	5	4	4	1
Arkansas	485	480	490	515	744	818	909	947	998	1,008	1,013	1,041	876	1,172
California	774	826	879	950	1,033	1,068	1,059	994	897	980	962	1,086	1,095	1,142
Colorado	462	451	501	560	701	826	827	810	805	861	928	934	1,050	1,347
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	74	30	25	25	25	3	3	5	5	8	14	31	36	37
Indiana	300	290	285	280	275	275	271	265	263	50	83	87	106	474
Kansas	6,633	6,915	7,050	7,174	7,200	8,608	8,603	8,509	8,567	8,660	8,585	8,621	8,785	8,800
Kentucky	5,119	5,200	5,210	5,320	6,100	6,020	6,215	6,290	6,413	6,913	7,413	7,099	7,224	7,307
Louisiana	6,990	7,442	7,859	8,260	8,563	8,977	9,036	9,163	9,354	9,690	9,748	9,456	10,551	9,248
Maryland	34	33	33	16	20	8	13	15	13	16	14	16	15	15
Michigan	155	174	175	195	226	250	244	199	211	1,235	1,171	1,317	1,145	503
Mississippi	472	490	450	435	370	376	360	347	322	325	400	252	250	239
Missouri	9	6	6	6	11	11	11	11	11	11	2	3	2	3
Montana	981	954	905	869	784	784	648	1,196	1,098	739	1,056	1,116	1,118	1,450
Nebraska	49	47	44	41	39	37	37	36	35	35	29	29	29	25
New Mexico	6,491	6,967	7,150	7,306	8,010	8,017	8,274	8,754	9,100	8,848	9,388	9,679	9,711	9,915
New York	1,109	1,130	1,130	1,155	1,150	1,164	1,159	1,155	818	600	600	650	789	700
North Dakota	28	29	31	31	31	31	31	19	33	29	29	21	44	34
Ohio	7,077	7,117	7,128	7,160	7,100	3,790	3,865	7,211	7,334	7,789	8,179	8,630	9,406	10,038
Oklahoma	6,218	6,324	6,639	6,813	7,447	7,841	7,726	8,337	8,432	8,168	8,507	8,457	8,868	9,401
Pennsylvania	16,500	16,600	16,600	14,120	17,516	17,808	17,700	17,000	16,600	16,239	16,586	16,600	16,600	17,123
South Dakota	--	--	--	--	--	--	--	--	--	--	--	5	10	20
Tennessee	23	30	30	30	20	20	21	23	26	15	20	45	6	13
Texas	19,831	20,834	22,016	22,995	23,748	23,907	23,760	23,805	23,689	23,417	23,280	23,373	23,805	24,646
Utah	135	121	135	135	148	156	168	165	171	173	178	200	158	114
Virginia	98	98	98	100	99	104	104	111	111	115	115	130	178	174
West Virginia	16,297	17,121	17,500	17,960	19,600	20,830	20,500	18,214	18,600	20,702	21,025	21,324	21,400	21,450
Wyoming	460	547	578	610	701	741	749	787	521	800	840	887	850	900
Total	96,809	100,267	102,966	103,084	111,680	112,498	112,321	114,391	114,476	117,483	120,210	121,153	124,178	126,349

Source: U.S. Bureau of Mines, Natural Gas Annuals

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Alabama	45	66	69	189	250	314	385	489	461	690	863	1,029
Alaska	61	50	50	52	58	71	79	97	78	81	84	85
Arizona	1	1	1	1	1	1	1	1	1	1	1	1
Arkansas	1,128	1,223	1,253	1,335	1,402	1,114	1,600	1,959	1,763	2,371	2,623	2,719
California	1,585	1,123	1,050	1,131	1,117	1,125	1,110	1,352	1,413	1,469	1,566	1,316
Colorado	1,380	1,500	2,053	2,318	2,574	2,997	3,543	4,008	4,361	4,549	4,401	4,396
Federal OCS(3)	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	41	34	34	51	51	70	70	57	64	81	123	152
Indiana	478	563	596	641	655	698	720	736	737	758	1,272	1,289
Kansas	8,865	9,330	9,375	9,450	10,544	12,820	15,550	13,800	14,100	4,925	15,980	11,485
Kentucky	7,386	7,505	7,649	7,776	7,883	7,984	8,151	8,219	8,532	8,798	9,285	9,747
Louisiana	11,359	11,370	12,484	13,333	14,464	16,190	17,048	16,586	16,700	17,124	16,716	15,313
Maryland	15	14	12	12	12	9	10	8	8	9	7	6
Michigan	209	214	212	376	376	423	448	484	414	535	655	651
Mississippi	248	257	365	402	433	447	470	596	552	683	710	414
Missouri	3	3	7	7	0	0	0	0	0	4	4	9
Montana	1,235	1,490	1,438	1,755	1,881	1,881	2,140	2,111	2,133	2,153	2,260	2,799
Nebraska	19	17	18	22	20	22	25	23	23	23	19	16
New Mexico	10,352	10,674	11,812	12,609	13,598	14,571	15,560	16,967	17,547	17,806	18,308	18,647
New York	900	1,400	1,600	1,900	2,200	2,076	2,636	2,969	3,423	3,500	4,500	4,947
North Dakota	18	34	34	23	78	80	65	66	51	55	62	61
Ohio	10,382	11,509	13,032	14,197	15,827	17,251	19,405	22,112	25,762	28,657	31,343	32,721
Oklahoma	9,769	10,436	11,570	12,861	14,417	16,419	18,451	20,742	22,230	3,691	24,756	25,762
Oregon	0	0	0	0	5	5	9	6	8	6	9	14
Pennsylvania	17,300	17,500	17,396	18,900	19,800	19,900	21,500	23,000	24,000	25,500	26,500	27,600
South Dakota	20	20	20	20	10	13	39	38	40	42	44	44
Tennessee	5	7	49	75	184	177	255	340	540	780	988	921
Texas	26,184	27,762	31,512	33,157	35,650	37,724	40,612	44,130	44,699	45,139	44,320	42,713
Utah	271	71	535	171	182	200	226	282	322	700	755	594
Virginia	186	180	202	227	258	258	288	298	299	425	495	573
West Virginia	21,700	22,100	22,600	23,575	24,725	25,900	27,200	27,450	29,675	31,150	32,475	33,400
Wyoming	950	990	995	888	1,236	1,264	1,243	1,827	1,986	2,148	2,220	2,101
Total	132,095	137,443	148,018	157,454	169,891	182,004	198,839	210,753	221,952	233,853	243,344	241,527

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(1) Included in other.
(2) Includes offshore wells in state waters only.
(3) Includes all U.S. wells producing in federal offshore waters.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals

Section III
Table 18

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Alabama	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	221
Alaska	--	--	--	--	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--	--	--	--	--
Arkansas	3,590	3,670	3,660	3,700	3,800	3,930	4,190	4,410	4,610	5,225	5,680
California	24,420	26,460	24,350	28,080	29,630	30,900	31,920	32,860	34,760	35,990	37,020
Colorado	600	700	750	770	840	1,000	1,220	1,750	1,940	2,150	2,185
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	11
Illinois	25,670	26,500	27,100	27,500	27,420	27,460	29,520	30,280	29,600	31,400	31,585
Indiana	2,300	2,780	2,950	3,410	3,600	3,840	4,020	4,160	4,080	4,405	4,515
Kansas	27,500	27,900	29,600	31,000	32,460	33,620	35,420	37,755	36,177	37,570	38,330
Kentucky	14,780	14,750	15,500	15,650	16,900	16,950	16,600	16,900	17,800	18,660	18,260
Louisiana	8,700	9,770	10,890	11,860	12,490	13,290	14,220	15,980	18,800	20,905	21,945
Michigan	3,540	3,550	3,820	3,950	3,800	3,980	4,000	4,173	4,034	4,191	3,995
Mississippi	1,120	1,320	1,400	1,670	1,760	1,870	1,950	2,173	2,339	2,374	2,313
Missouri	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	107
Montana	2,890	3,100	3,180	3,300	3,380	3,510	3,410	3,415	3,414	3,584	3,792
Nebraska	60	50	60	140	260	300	350	550	790	825	1,030
Nevada	--	--	--	--	--	--	(1)	--	--	--	2
New Mexico	5,000	5,370	5,580	6,020	6,350	6,790	7,320	7,760	8,640	9,415	10,820
New York	22,500	23,100	23,000	23,200	23,200	22,950	22,730	22,390	20,100	19,670	19,695
North Dakota	--	--	--	(1)	(1)	83	257	460	570	789	920
Ohio	19,500	20,000	19,900	18,580	17,650	17,600	15,670	14,110	14,195	14,385	14,490
Oklahoma	52,200	53,000	54,400	56,800	57,600	60,320	63,400	65,390	69,930	70,075	74,425
Pennsylvania	83,600	82,000	82,100	81,190	78,800	80,600	79,430	73,700	72,525	71,080	69,610
South Dakota	--	--	--	--	--	--	(1)	(1)	(1)	(1)	3
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	35
Texas	107,600	113,100	119,900	128,500	134,670	139,530	143,990	153,190	159,880	178,095	187,935
Utah	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	225
Virginia	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	4
West Virginia	16,250	16,000	15,400	15,000	14,500	13,900	13,460	12,900	12,500	12,770	12,715
Wyoming	4,320	4,600	4,950	5,320	5,610	5,800	5,530	6,530	6,960	7,190	7,405
Other	140	160	190	230	270	297	333	364	366	422	--
Total	426,280	437,880	448,680	465,870	474,990	488,520	498,940	511,200	524,010	551,170	569,273

(1) Included in Other.

Source: U.S. Bureau of Mines, Annual Petroleum Statements

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Ala.	281	334	380	418	449	502	519	518	524	532	546	550
Ak.	2	5	17	45	52	54	56	57	72	94	163	183
Ariz.	1	2	3	5	4	9	8	10	6	20	22	29
Ark.	5,715	6,155	6,381	6,330	5,918	6,010	6,018	6,014	6,372	6,459	6,445	6,118
Ca.	36,285	36,915	37,771	38,184	39,265	40,233	40,916	41,031	41,348	41,608	41,360	40,997
Co.	2,195	2,089	2,021	2,023	2,110	2,030	1,981	1,938	2,371	1,730	1,825	1,811
Fla.	11	11	11	11	11	12	19	38	42	41	44	45
Ill.	31,775	31,826	31,995	31,911	30,174	30,149	29,500	29,017	28,608	27,887	27,236	26,733
Ind.	4,865	5,050	5,176	5,679	5,607	5,951	5,381	5,275	5,300	4,831	4,330	4,094
Kn.	37,880	40,175	40,460	40,933	46,750	46,951	46,715	47,354	46,016	47,597	45,145	44,665
Ky.	18,965	21,165	20,571	19,857	19,448	14,903	15,226	15,600	14,800	13,255	12,311	11,843
La.	23,070	23,468	24,682	24,740	26,382	27,638	29,452	30,179	31,063	30,670	30,266	29,393
Mich.	3,895	4,130	4,348	4,301	4,282	4,234	4,151	4,036	4,141	4,004	4,273	3,878
Miss.	2,240	2,403	3,086	2,819	2,560	2,682	2,580	2,513	2,549	2,557	2,599	2,548
Mc.	127	121	120	116	105	105	100	142	150	146	128	164
Mt.	3,916	3,888	3,707	3,342	3,692	3,642	3,329	3,799	3,507	3,390	3,385	3,331
Nebr.	1,190	1,461	1,571	1,860	1,764	1,726	1,711	1,611	1,511	1,430	1,403	1,305
Nev.	2	2	2	4	4	4	5	9	10	13	13	11
N.M.	12,045	12,045	14,286	15,295	16,102	16,796	17,570	18,000	16,504	16,745	16,903	17,088
N.Y.	19,530	19,230	18,579	17,829	13,537	13,431	12,526	12,304	11,832	4,712	4,201	5,263
N.D.	1,150	1,390	1,451	1,683	1,794	1,824	1,881	1,983	2,017	2,063	2,075	1,987
Ohio	15,200	16,934	16,743	16,682	16,867	14,605	13,752	13,947	14,192	14,638	15,480	15,737
Ok.	75,210	75,630	77,720	79,387	80,799	81,475	80,511	80,947	80,583	80,970	81,052	80,952
Pa.	68,485	68,450	66,260	63,576	59,673	54,062	53,065	52,731	50,645	45,426	42,500	37,625
S.D.	4	14	19	19	19	24	24	28	29	28	27	26
Tenn.	35	34	27	30	40	39	38	33	32	33	32	35
Tx.	189,960	188,934	192,934	196,396	197,659	198,070	199,119	197,924	196,308	192,001	187,922	183,141
Utah	519	697	796	795	852	835	840	841	867	869	875	843
Va.	6	7	5	5	5	6	8	6	2	4	5	5
W.Va.	12,815	12,780	12,560	12,762	12,880	13,044	13,205	13,225	13,467	12,989	13,049	12,849
Wyo.	7,530	7,090	7,475	7,880	7,581	7,611	8,019	8,093	8,434	8,547	8,305	8,978
Other	1	1	1	--	--	--	--	--	--	--	--	--
Tot.	574,905	583,141	591,158	594,917	596,385	588,657	588,225	589,203	583,302	565,289	553,920	542,227

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section III
Table 18b

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Alabama	562	556	544	586	582	608	633	631	648	660	684	692
Alaska	202	173	193	192	199	205	181	298	348	396	443	700
Arizona	28	30	28	28	25	28	27	29	34	35	31	35
Arkansas	7,082	7,110	7,157	7,232	7,235	7,308	7,529	7,756	7,866	8,115	8,104	8,249
California	40,437	39,668	39,254	38,626	40,479	41,029	42,534	43,525	43,375	43,838	45,086	47,362
Colorado	1,770	1,785	1,897	2,004	2,174	2,450	2,827	3,027	3,260	3,450	3,490	2,898
Florida	60	78	142	147	136	143	143	140	111	115	121	117
Illinois	26,134	25,361	24,716	24,309	23,630	23,373	23,527	23,752	23,900	24,067	24,871	26,100
Indiana	4,055	3,605	4,379	4,323	4,376	4,798	4,891	5,076	5,296	5,452	5,452	5,715
Kansas	43,490	42,180	41,055	41,520	41,755	41,945	42,240	42,450	42,900	43,200	48,037	42,402
Kentucky	11,659	14,657	14,616	14,416	14,127	13,905	13,970	14,046	14,097	14,172	14,539	14,585
Louisiana	27,934	26,829	27,762	27,869	27,973	27,734	26,274	23,881	24,500	24,767	26,014	25,320
Michigan	4,311	4,046	3,685	3,733	4,201	3,655	3,770	3,903	3,890	3,890	4,900	4,417
Mississippi	3,102	3,109	3,195	2,901	2,254	2,237	2,212	2,806	2,956	3,263	3,676	3,154
Missouri	126	139	137	135	157	163	173	175	167	251	258	421
Montana	3,243	3,145	3,544	3,471	3,103	3,247	3,309	3,330	3,400	3,661	3,618	3,968
Nebraska	1,244	1,191	1,143	1,107	1,127	1,190	1,291	1,382	1,469	1,551	1,693	1,870
Nevada	9	6	6	6	9	6	12	18	16	20	20	(1)
New Mexico	17,314	17,210	17,287	17,099	13,304	13,715	13,939	14,338	17,453	21,526	15,103	16,289
New York	5,861	5,860	5,427	5,200	5,475	4,975	5,100	4,800	5,039	5,100	5,220	5,300
N. Dakota	1,457	1,466	1,401	1,404	1,488	1,994	1,568	1,608	2,305	2,624	2,938	2,570
Ohio	15,860	14,771	15,222	15,236	16,658	16,611	16,761	17,338	18,289	19,596	21,132	22,441
Oklahoma	78,019	75,572	73,745	72,880	71,797	71,576	72,543	73,752	75,308	76,505	81,296	82,639
Penn.	36,801	34,019	32,596	31,539	32,095	32,095	28,805	28,400	27,768	27,925	25,991	26,138
S. Dakota	26	33	29	27	31	38	43	69	85	94	97	120
Tennessee	59	78	73	67	154	172	215	283	311	351	435	489
Texas	177,221	172,696	167,233	159,090	159,702	160,603	160,546	163,746	166,365	169,826	175,673	180,627
Utah	889	870	890	989	1,076	1,323	1,188	1,448	1,291	1,560	1,714	1,543
Virginia	5	1	1	--	3	7	7	4	5	7	8	(1)
W. Virginia	12,750	12,112	12,136	13,600	13,650	13,750	13,800	13,900	14,100	14,250	14,425	14,700
Wyoming	9,280	8,952	8,950	7,642	8,656	9,450	9,052	11,123	10,200	11,128	12,648	11,574
Other	--	--	--	--	--	--	--	0	0	0	0	39
Total	530,990	517,318	508,443	497,378	497,631	500,333	499,110	507,034	516,752	531,395	547,717	557,009(2)

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(1) Included in other.
(2) In 1981, total includes 4,535 producing wells in federal waters.

Source: U.S. Energy Information Administration, Annual Petroleum Statements
1981 -- World Oil, Forecast Review Issue, February issue

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1982	1983	1984	1985	1986	1987
Alabama	719	741	759	810	844	875
Alaska	760	672	640	977	1,109	1,216
Arizona	36	34	31	28	NA	NA
Arkansas	8,629	8,370	9,490	9,700	10,047	8,398
California	47,231	47,197	48,541	49,874	43,717	45,694
Colorado	3,113	4,591	5,360	5,457	5,502	5,642
Florida	123	137	138	149	114	122
Illinois	27,600	28,697	30,045	31,100	32,025	32,307
Indiana	6,047	6,465	6,792	7,164	7,610	7,449
Kansas	46,189	49,348	49,198	51,888	48,816	48,051
Kentucky	15,109	15,562	19,980	21,844	22,639	22,974
Louisiana	22,380	23,276	24,508	26,354	29,921	29,758
Michigan	4,536	4,913	4,881	5,143	4,885	4,996
Mississippi	2,640	2,727	2,562	3,468	2,235	2,143
Missouri	499	552	557	581	450	200
Montana	4,311	4,675	4,201	4,196	3,933	4,050
Nebraska	2,006	2,100	2,095	2,091	1,838	1,852
Nevada	(1)	(1)	37	45	NA	NA
New Mexico	16,526	17,409	18,146	18,697	18,409	18,401
New York	5,320	5,432	4,678	4,811	4,632	4,428
North Dakota	2,870	3,734	3,404	3,697	3,543	3,474
Ohio	24,752	26,287	26,878	27,975	29,937	30,013
Oklahoma	91,745	95,868	99,600	102,342	100,261	101,745
Pennsylvania	25,285	24,657	20,739	24,000	20,000	14,271
South Dakota	130	140	138	165	148	149
Tennessee	650	693	775	798	806	648
Texas	187,626	195,595	203,664	209,040	201,272	198,163
Utah	1,583	1,634	1,799	1,944	1,858	1,785
Virginia	(1)	(1)	(1)	28	32	29
West Virginia	14,900	15,300	15,475	15,895	15,750	15,850
Wyoming	11,792	11,349	11,561	12,038	11,879	10,953
Other	50	55	31	0	0	58
Total	580,142(2)	603,290(2)	620,807(2)	646,626(2)	628,690(2)	620,181(2)

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(1) Included in other.
(2) In 1982, total includes 4,985 producing wells in federal waters; in 1983, 4,710; in 1984, 4,104; in 1985, 4,327; in 1986, 4,425; and in 1987, 4,487.

Source: World Oil Magazine, Forecast Review Issue, February.

Section III
Table 19

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1947		1948		1949		1950		1951		1952	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	0	33	0	33	0	39	0	58	0	75	4	92
Alaska	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	378	2,992	340	3,040	291	3,076	361	3,266	312	3,329	350	3,758
California	2,363	22,792	2,136	24,413	2,373	22,127	2,143	25,963	1,934	27,656	1,866	29,005
Colorado	127	411	113	611	87	662	191	572	135	700	85	886
Florida	4	1	5	3	5	6	1	11	1	11	1	11
Illinois	68	28,405	48	30,261	71	31,169	16	33,113	12	32,873	7	33,727
Indiana	2	2,807	18	3,252	35	3,739	12	3,946	18	4,222	22	4,473
Kansas	85	26,846	143	24,975	62	29,033	73	30,093	45	31,215	58	32,018
Kentucky	0	14,509	0	14,554	0	14,895	5	15,260	36	15,524	0	15,806
Louisiana	3,168	4,516	3,367	5,508	3,320	6,689	3,477	7,667	3,417	8,106	3,591	8,770
Michigan	276	3,356	296	3,131	387	3,268	141	3,577	155	3,730	134	3,858
Mississippi	416	636	495	737	476	886	280	1,168	126	1,466	206	1,504
Missouri	0	36	0	48	0	88	0	46	0	43	0	70
Montana	24	2,455	24	3,140	39	2,865	20	3,086	22	3,188	30	3,286
Nebraska	0	55	0	46	0	62	35	107	27	181	2	221
Nevada	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico	3,636	1,395	3,288	2,004	3,014	2,509	3,232	2,597	3,283	2,768	3,462	3,141
New York	0	23,000	0	23,000	0	23,400	0	23,200	0	23,100	0	23,000
North Dakota	0	0	0	0	0	0	0	0	2	0	68	17
Ohio	50	22,825	65	22,945	60	21,740	50	19,750	50	18,450	40	19,410
Oklahoma	1,485	50,405	1,380	51,731	1,426	52,934	1,740	55,086	1,605	56,715	1,485	58,762
Pennsylvania	0	82,800	0	84,000	0	82,100	0	82,200	0	81,200	0	81,200
South Dakota	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee	0	22	0	29	0	35	0	36	0	34	0	35
Texas	37,070	67,909	37,970	71,673	39,203	76,280	41,949	81,322	44,016	86,293	45,784	90,615
Utah	0	0	2	1	22	0	3	30	4	38	10	51
Virginia	0	12	0	15	0	15	0	15	0	15	0	25
Washington	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia	0	17,000	0	16,200	0	15,900	0	15,200	0	14,600	0	14,200
Wyoming	247	3,905	336	4,222	464	4,452	323	4,887	313	5,292	242	4,614
U.S. Total	49,399	379,123	50,036	389,572	51,335	397,969	54,052	412,256	55,513	420,824	57,447	432,375

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

	1953		1954		1955		1956		1957		1958	
State	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	2	110	5	108	11	102	62	97	35	181	27	227
Alaska	0	0	0	0	0	0	0	0	0	0	1	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	336	3,699	270	3,925	410	4,057	382	4,419	246	5,173	232	5,417
California	1,834	29,950	1,770	31,303	1,759	32,571	1,599	34,625	1,496	35,756	1,290	35,170
Colorado	132	1,098	97	1,633	345	1,784	433	1,724	572	1,612	573	1,625
Florida	0	12	0	13	0	11	0	11	0	11	0	11
Illinois	5	34,417	10	35,155	27	36,758	29	37,689	213	37,828	231	38,366
Indiana	9	4,825	3	4,954	23	5,011	19	5,160	300	4,816	173	5,094
Kansas	42	33,272	31	34,523	121	35,452	127	36,986	103	38,466	131	39,133
Kentucky	0	16,234	0	16,593	12	17,008	21	17,681	19	18,238	8	18,982
Louisiana	4,354	8,583	4,937	9,588	5,855	10,817	6,998	11,737	7,991	12,224	8,537	13,176
Michigan	123	3,863	190	3,842	550	3,689	550	3,453	615	3,397	41	4,198
Mississippi	307	1,536	319	1,547	497	1,617	628	1,801	327	2,005	352	2,087
Missouri	0	91	0	89	0	97	0	130	0	120	0	119
Montana	51	3,421	110	3,641	311	3,587	512	3,516	585	3,261	407	3,210
Nebraska	0	302	0	547	31	932	19	1,602	87	1,616	26	1,320
Nevada	0	0	0	1	0	3	0	3	0	2	0	2
New Mexico	3,644	3,606	3,710	3,656	3,502	4,727	3,563	5,424	4,259	5,809	3,972	6,839
New York	0	23,000	0	22,500	0	22,300	0	21,300	0	19,200	0	19,765
North Dakota	179	73	353	88	444	92	458	313	543	395	503	640
Ohio	70	19,400	90	15,210	80	14,660	75	14,745	130	14,700	175	14,850
Oklahoma	2,120	60,956	2,860	64,551	3,180	71,430	2,773	73,019	2,264	75,623	2,771	76,981
Pennsylvania	0	80,500	0	80,000	0	78,500	0	76,500	0	69,700	0	68,050
South Dakota	0	1	0	2	0	3	0	3	0	3	1	3
Tennessee	0	29	0	44	0	25	0	40	0	35	0	31
Texas	45,976	94,884	47,032	100,712	47,669	108,811	48,513	117,473	48,098	125,861	47,897	131,781
Utah	3	66	1	81	2	68	23	87	129	210	307	241
Virginia	0	25	0	25	0	25	0	20	0	0	0	0
Washington	0	0	0	0	0	0	0	0	2	0	1	0
West Virginia	0	13,600	0	13,000	0	12,500	0	12,000	0	12,700	0	12,740
Wyoming	278	4,841	368	5,321	535	5,681	473	5,959	513	6,074	467	6,334
U.S. Total	59,465	442,394	62,156	454,652	65,364	472,318	67,257	487,517	68,527	495,016	68,123	506,392

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

	1959		1960		1961		1962		1963		1964	
State	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	29	244	0	380	0	414	0	447	0	499	0	479
Alaska	5	0	18	0	45	0	50	2	48	7	37	17
Arizona	1	0	2	1	0	4	0	13	0	5	0	10
Arkansas	178	5,881	183	5,810	190	6,267	543	5,301	160	5,239	150	5,950
California	1,115	36,101	1,196	36,388	1,033	37,203	1,213	37,980	1,251	39,099	1,270	39,510
Colorado	382	1,701	127	1,892	115	1,864	110	1,865	72	1,888	58	1,832
Florida	0	11	0	11	0	11	0	11	0	12	0	16
Illinois	128	38,736	67	38,239	74	39,381	0	30,196	0	30,114	0	29,319
Indiana	169	5,303	86	5,381	84	5,792	0	5,887	0	5,937	0	5,949
Kansas	243	39,921	312	46,270	270	46,920	275	47,286	278	47,587	300	48,700
Kentucky	19	21,137	13	20,733	15	20,746	0	19,800	0	19,000	0	15,726
Louisiana	9,280	13,805	8,896	14,389	9,420	14,612	10,951	14,691	11,692	16,037	12,401	17,260
Michigan	59	4,332	850	3,704	931	3,413	832	3,538	915	3,188	915	3,660
Mississippi	383	2,236	277	2,347	289	2,408	525	2,035	554	2,139	342	2,238
Missouri	0	95	0	121	0	120	0	111	0	118	0	87
Montana	331	3,375	33	3,478	33	3,404	41	3,659	36	3,552	34	3,960
Nebraska	21	1,473	15	1,627	18	1,967	0	1,855	5	1,769	5	1,733
Nevada	0	2	0	2	0	2	0	2	0	4	0	5
New Mexico	4,530	7,657	5,323	7,261	4,880	8,857	5,324	8,909	4,861	9,003	4,814	9,828
New York	0	19,275	0	19,000	0	18,000	0	13,500	0	13,100	0	12,800
North Dakota	392	988	74	1,343	92	1,453	567	1,015	600	1,206	453	1,428
Ohio	160	14,768	150	14,560	145	14,305	150	14,350	80	14,525	50	13,683
Oklahoma	2,987	78,128	3,147	80,459	3,775	81,048	3,750	77,795	3,840	77,686	3,857	76,602
Pennsylvania	0	67,580	10	65,000	0	61,896	0	56,900	20	55,360	22	53,043
South Dakota	0	11	0	19	0	24	0	18	0	24	0	24
Tennessee	0	30	0	27	0	30	0	30	0	40	0	41
Texas	47,366	138,298	45,722	143,789	44,936	147,587	44,202	149,526	42,218	152,251	40,481	154,088
Utah	346	317	352	404	349	602	320	500	318	520	15	926
Virginia	0	0	0	8	0	8	0	5	0	6	0	6
Washington	1	0	1	0	1	0	0	0	0	0	0	0
West Virginia	0	12,885	0	12,950	0	12,350	0	12,800	0	13,000	0	13,200
Wyoming	489	6,629	413	7,117	408	7,417	400	9,000	455	7,459	450	7,481
U.S. Total	68,614	520,919	67,267	532,710	67,103	538,105	69,253	519,027	67,403	520,374	65,654	519,601

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1965 Flowing	1965 Artificial Lift	1966 Flowing	1966 Artificial Lift	1967 Flowing	1967 Artificial Lift	1968 Flowing	1968 Artificial Lift	1969 Flowing	1969 Artificial Lift	1970 Flowing	1970 Artificial Lift
Alabama	0	530	0	520		529	5	542	7	467	8	468
Alaska	25	35	42	15	70	19	93	86	58	135	41	120
Arizona	6	4	6	4	(1)	(1)	0	(1)	0	0	(1)	(1)
Arkansas	212	5,730	104	5,453	197	6,237	83	5,896	106	6,012	100	6,100
California	1,204	40,323	1,176	40,516	1,026	40,597	1,428	40,103	1,390	39,505	1,350	37,718
Colorado	61	1,771	42	1,649	37	1,773	33	1,782	30	1,748	37	1,733
Florida	2	36	0	41	(1)	(1)	0	(1)	0	0	(1)	(1)
Illinois	0	29,012	20	28,550	0	27,874	0	27,242	0	26,737	0	26,298
Indiana	0	4,149	0	4,149	0	3,637	0	3,621	0	3,646	0	3,607
Kansas	300	46,200	300	40,622	400	45,925	400	44,755	350	44,390	350	44,315
Kentucky	0	15,600	0	16,000	500	13,500	609	13,000	532	13,220	502	14,000
Louisiana	12,982	17,921	12,338	18,546	12,435	18,511	11,018	13,015	10,756	18,861	9,064	19,214
Michigan	890	3,153	800	3,204	77	3,291	686	3,587	551	3,821	677	3,196
Mississippi	354	2,159	362	2,187	348	2,172	328	2,271	303	2,245	290	2,276
Missouri	0	100	0	142	(1)	(1)	0	(1)	0	0	(1)	(1)
Montana	46	3,677	11	3,582	38	3,724	14	3,252	25	3,460	3	3,159
Nebraska	5	1,614	0	1,493	4	1,457	3	1,404	2	1,369	6	1,299
Nevada	0	9	0	10	(1)	(1)	0	(1)	0	0	(1)	(1)
New Mexico	4,682	9,753	3,499	10,798	3,645	10,712	3,277	11,106	3,186	11,152	3,198	11,075
New York	0	11,700	100	12,200	100	12,000	0	11,500	0	9,500	0	5,000
North Dakota	524	1,439	315	1,718	250	1,513	224	1,503	495	1,155	229	1,506
Ohio	60	13,873	50	14,133	50	14,240	60	14,347	80	14,584	60	14,727
Oklahoma	3,800	76,200	4,000	77,477	4,000	76,971	4,000	76,999	4,000	76,947	4,000	74,212
Pennsylvania	18	52,713	75	50,570	50	45,376	50	35,950	50	33,950	70	30,555
South Dakota	0	29	0	29	(1)	(1)	0	(1)	0	0	(1)	(1)
Tennessee	0	42	0	34	(1)	(1)	0	(1)	0	0	(1)	(1)
Texas	39,052	155,618	36,160	155,281	33,060	155,761	31,525	152,452	28,934	149,837	26,199	146,014
Utah	9	852	10	861	15	981	15	881	15	867	23	884
Virginia	0	7	0	2	(1)	(1)	0	(1)	0	0	(1)	(1)
West Virginia	0	13,400	0	13,300	0	14,250	0	14,000	0	13,800	0	13,700
Wyoming	400	7,594	422	8,012	456	8,091	527	8,396	687	8,386	700	8,800
Other	0	0	0	0	3	263	0	263	0	289	21	273
U.S. Total	64,632	515,243	59,832	511,098	57,465	509,404	54,378	493,593	51,557	486,083	46,928	470,249

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(1) Included in other.

Source: World Oil Magazine

Section III
Table 19d

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

	1971		1972		1973		1974		1975		1976	
State	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	14	524	27	499	44	510	35	384	36	530	40	593
Alaska	53	130	58	139	52	140	42	186	36	164	38	152
Arizona	0	29	1	22	1	22	0	28	0	28	0	27
Arkansas	60	7,086	69	7,168	96	6,328	123	6,993	125	6,947	140	7,072
California	1,300	39,298	421	39,865	496	42,847	453	39,777	370	40,569	496	44,287
Colorado	50	1,845	110	1,709	134	1,721	119	1,921	108	2,232	111	2,265
Florida	8	65	68	67	81	64	63	70	72	72	66	78
Illinois	0	25,369	0	24,736	0	24,307	0	23,718	0	23,360	0	23,509
Indiana	0	3,600	0	4,379	0	4,323	0	4,376	0	4,380	0	4,798
Kansas	325	41,960	325	40,730	319	42,181	276	41,480	250	41,695	200	42,050
Kentucky	557	14,100	560	14,056	100	14,316	0	14,129	0	14,231	0	13,970
Louisiana	7,534	18,216	7,388	19,208	6,203	21,666	6,545	21,428	5,979	21,755	6,128	20,272
Michigan	650	3,200	668	3,129	659	3,082	682	3,132	548	3,107	608	3,162
Mississippi	300	2,255	275	2,298	202	2,108	180	2,074	160	2,077	149	2,063
Missouri	0	139	0	138	0	135	0	137	0	157	0	145
Montana	23	3,707	19	3,196	3	3,533	7	3,021	7	3,143	12	3,298
Nebraska	4	1,190	4	1,176	0	1,118	0	1,109	0	1,127	0	1,292
Nevada	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New Mexico	2,388	10,997	2,386	11,048	2,300	11,138	2,143	11,139	2,255	11,395	2,313	11,533
New York	0	5,860	0	5,500	0	5,400	0	5,475	0	4,975	0	5,000
North Dakota	263	1,453	225	1,340	224	1,237	243	1,245	236	1,248	269	1,302
Ohio	50	14,581	295	14,491	304	14,847	302	14,847	288	14,877	310	15,143
Oklahoma	4,000	71,549	4,000	69,807	3,943	69,082	3,879	67,969	4,089	67,568	4,131	68,257
Pennsylvania	70	29,731	80	26,949	75	32,521	75	30,825	50	32,200	65	32,000
South Dakota	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	12	59	16	40	6	61	31	56	55	94	75	122
Texas	24,305	149,902	22,680	148,689	19,998	139,314	20,063	40,011	18,584	152,462	16,997	143,678
Utah	46	828	87	812	82	1,362	230	989	121	935	100	1,088
Virginia	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Washington	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
West Virginia	0	13,500	0	13,530	0	13,600	0	13,650	0	13,750	0	13,800
Wyoming	650	8,600	600	8,350	535	7,107	606	8,050	662	8,788	720	9,307
Other	0	36	0	72	10	31	9	28	9	28	1	17
U.S. Total	42,662	469,809	40,362	463,143	35,867	464,101	36,105	458,247	34,040	473,900	32,969	470,299

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(1) Included in other.

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1977		1978		1979		1980		1981		1982	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	40	597	55	575	57	457	57	612	103	589	122	597
Alaska	135	156	188	178	240	160	412	230	296	404	330	430
Arizona	0	28	0	31	0	35	0	32	0	35	0	36
Arkansas	155	7,348	197	7,356	202	7,496	140	7,964	156	8,093	173	8,456
California	481	42,973	517	44,482	1,635	43,039	1,667	43,924	1,592	45,770	1,470	45,761
Colorado	213	2,832	226	3,001	183	3,219	188	3,302	151	2,747	218	2,895
Florida	144	0	50	65	43	72	40	80	42	75	50	73
Illinois	0	23,828	0	23,869	0	24,067	0	24,745	0	26,100	0	27,600
Indiana	0	4,891	0	5,076	0	5,296	0	5,452	0	5,715	0	6,047
Kansas	200	42,250	204	43,054	223	47,156	60	47,397	42	42,360	46	46,143
Kentucky	0	14,046	0	14,149	0	14,097	0	14,517	0	14,585	0	15,109
Louisiana	2,228	21,653	2,244	22,256	4,251	20,516	4,226	21,788	3,871	21,449	2,001	20,379
Michigan	603	3,300	547	3,343	547	3,343	585	3,524	631	3,786	636	3,900
Mississippi	152	2,108	88	2,166	91	2,465	120	2,511	144	3,010	132	2,508
Missouri	0	161	0	161	0	188	20	238	0	421	0	499
Montana	70	3,284	328	2,947	375	3,198	325	3,303	375	3,593	350	3,961
Nebraska	0	1,369	0	1,455	0	1,535	4	1,675	0	1,870	0	2,006
Nevada	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
New Mexico	2,405	11,860	2,144	12,254	2,723	12,322	2,565	13,181	2,986	13,303	3,068	13,458
New York	0	4,800	0	4,900	0	4,800	0	5,000	0	5,300	0	5,320
North Dakota	297	1,341	358	1,374	404	1,504	554	1,736	622	1,948	800	2,070
Ohio	347	17,016	362	17,735	384	18,793	409	20,042	447	21,994	470	24,282
Oklahoma	4,203	69,450	4,247	70,623	4,345	72,160	4,332	74,131	4,563	78,076	5,046	86,699
Pennsylvania	50	28,755	50	28,350	56	27,712	56	27,869	52	26,086	52	25,233
South Dakota	(1)	(1)	0	(1)	3	85	3	115	0	120	0	130
Tennessee	115	157	119	160	144	194	106	335	117	372	120	530
Texas	16,168	147,647	16,109	149,708	16,665	151,458	16,751	157,940	17,351	163,276	16,170	171,456
U.S. Federal Waters	2,702	829	2,624	805	915	2,344	917	2,349	3,267	1,268	3,589	1,396
Utah	369	494	552	739	576	770	436	1,042	419	1,124	396	1,187
Virginia	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
Washington	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
West Virginia	0	13,900	0	14,100	0	14,225	0	14,425	0	14,700	0	14,900
Wyoming	725	9,378	718	9,293	724	9,335	736	9,491	833	10,741	825	10,967
Other	13	74	0	106	0	28	0	31	0	39	1	49
U.S. Total	31,815	476,525	31,927	484,311	34,786	492,069	34,529	508,981	38,060	518,949	36,065	544,077

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(1) Included in other.

Source: World Oil Magazine

Section III
Table 19f

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1983		1984		1985		1986	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	102	639	50	709	91	719	102	742
Alaska	406	266	370	270	481	496	591	518
Arizona	0	34	0	31	0	28	0	24
Arkansas	168	8,202	189	9,301	195	9,505	201	9,486
California	1,482	45,715	1,423	47,118	1,455	48,419	1,419	42,298
Colorado	304	4,287	571	4,789	491	4,966	490	5,012
Florida	62	75	57	81	67	82	46	68
Illinois	0	28,967	0	28,920	0	31,100	0	32,025
Indiana	0	6,465	0	6,792	0	7,164	0	7,610
Kansas	53	49,295	49	49,149	75	51,813	73	48,743
Kentucky	0	15,562	0	19,980	0	21,844	0	22,639
Louisiana	2,110	21,266	2,168	22,340	2,285	23,538	2,205	22,430
Michigan	663	4,250	749	4,132	600	4,525	635	4,250
Mississippi	135	2,592	259	2,303	116	3,352	179	2,056
Missouri	0	552	0	557	0	581	0	450
Montana	400	4,275	424	4,292	378	3,818	362	3,571
Nebraska	0	2,100	0	2,095	0	2,091	0	1,838
Nevada	0	(1)	(1)	(1)	4	41	6	23
New Mexico	3,161	14,248	3,030	14,843	3,444	15,253	3,403	15,006
New York	7	5,425	28	4,650	20	4,791	10	4,622
North Dakota	717	3,017	830	2,574	927	2,770	641	2,902
Ohio	523	25,764	535	26,343	556	27,419	386	29,551
Oklahoma	4,794	91,074	4,980	94,620	5,150	97,850	5,013	95,248
Pennsylvania	47	24,610	0	20,739	0	24,000	0	20,000
South Dakota	0	140	0	138	0	165	0	148
Tennessee	126	567	139	636	137	661	0	806
Texas	15,182	180,413	15,216	188,448	16,247	192,793	14,147	187,125
U.S. Federal Waters	1,370	3,340	3,590	514	3,726	601	4,083	342
Utah	388	1,246	360	1,439	389	1,555	372	1,486
Virginia	0	(1)	(1)	(1)	(1)	(1)	0	32
Washington	0	(1)	(1)	(1)	(1)	(1)	0	0
West Virginia	0	15,300	0	15,475	0	15,895	0	15,759
Wyoming	794	10,555	809	10,752	831	11,207	784	11,095
Other	0	55	5	63	0	28	0	0
U.S. Total	32,994	570,296	36,104	584,093	37,665	609,070	35,148	588,256

(1) Included in other.

Source: World Oil Magazine, February issue.

U.S. STRIPPER WELLS BY STATE
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	--	--	14	39	44	75	71	78	69	78	68	73
Arizona	--	2	2	1	4	6	7	7	7	8	10	12
Arkansas	5,997	5,961	6,203	6,201	6,094	6,100	6,025	6,736	6,822	6,767	6,820	5,847
California	21,395	23,753	31,391	31,466	34,559	32,124	29,983	28,328	24,198	25,957	25,400	26,566
Colorado	740	774	807	867	818	881	942	990	1,016	1,074	1,143	1,255
Illinois	26,095	25,202	24,363	23,960	23,279	23,222	23,275	23,499	23,622	23,860	24,501	25,472
Indiana	7,246	6,995	7,570	4,251	3,962	4,654	4,853	5,056	5,038	5,092	5,022	5,874
Kansas	40,513	39,552	39,853	40,176	40,105	40,597	41,764	42,273	43,154	44,686	41,876	42,924
Kentucky	14,615	14,585	14,511	14,201	13,914	13,690	13,817	14,046	13,953	14,028	14,075	14,130
Louisiana	12,561	12,318	12,907	12,649	12,808	12,723	13,185	13,189	13,600	12,131	15,889	15,950
Michigan	3,555	3,392	3,389	3,356	3,370	3,330	3,260	3,276	3,331	3,405	3,325	3,057
Mississippi	344	313	211	217	278	310	617	654	657	813	1,523	2,138
Missouri	126	139	137	137	157	163	173	161	144	157	301	440
Montana	1,951	1,311	1,186	1,295	1,338	1,873	1,918	1,945	1,983	1,996	2,082	2,058
Nebraska	437	484	417	526	577	638	812	919	987	1,037	1,223	1,414
New Mexico	9,058	9,143	9,122	9,458	9,991	10,274	10,544	10,956	11,401	11,829	12,519	13,226
New York	5,861	5,522	5,528	5,282	4,828	5,231	4,916	4,913	4,700	5,000	5,220	5,345
North Dakota	679	721	749	635	529	569	655	687	741	782	878	836
Ohio	14,447	14,653	14,863	14,906	15,406	15,482	15,586	16,122	17,006	18,222	19,650	21,982
Oklahoma	55,718	54,712	54,788	57,000	59,817	58,736	53,357	56,239	59,971	64,893	66,128	69,781
Pennsylvania	36,801	34,029	32,596	31,539	32,095	31,661	31,274	28,400	27,768	27,925	25,991	25,285
South Dakota	--	11	12	12	8	9	10	16	11	10	12	23
Tennessee	44	46	41	53	99	133	159	213	265	318	387	398
Texas	85,117	84,950	83,666	82,302	87,412	89,027	91,498	92,887	96,713	98,487	103,594	107,596
Utah	37	44	53	84	74	48	77	74	95	106	125	196
Virginia	3	3	1	0	3	7	7	4	5	7	8	12
West Virginia	13,150	13,270	13,375	13,500	13,600	13,680	13,800	13,875	13,925	14,000	14,150	14,300
Wyoming	2,640	1,811	1,716	1,116	926	2,629	3,148	3,387	3,453	3,642	3,252	3,349
Total	359,130	353,696	359,471	355,229	366,095	367,872	365,733	368,930	374,635	386,310	395,176	409,539

Source: Interstate Oil Compact Commission and National Stripper Well Association.

U.S. STRIPPER WELLS BY STATE
(As of January 1)

State	1983	1984	1985	1986	1987	1988
Alabama	92	95	98	100	124	122
Arizona	14	17	14	14	16	15
Arkansas	5,167	7,218	4,738	4,942	4,416	4,438
California	26,354	26,358	26,650	29,230	29,044	26,988
Colorado	1,354	1,861	1,690	1,798	4,269	5,097
Illinois	26,813	28,566	29,942	30,593	31,649	31,883
Indiana	5,353	5,854	6,134	5,457	5,165*	4,985*
Kansas	44,521	47,592	45,749	48,235	50,182	51,953
Kentucky	14,275	17,000	16,433	17,674	17,992	18,073
Louisiana	12,010	16,500	16,500	16,000	15,500	15,000
Michigan	3,361	3,367	3,500	3,475	3,285*	3,015*
Mississippi	1,923	837	837	811	681*	644
Missouri	530	548	548	429	388	289
Montana	2,243	2,673	3,085	3,376	3,493	3,300
Nebraska	1,585	1,672	1,707	1,716	1,637	1,589
New Mexico	13,882	14,280	14,749	15,199	14,466	14,622
New York	5,259	4,228	4,532	4,448	4,309	4,221
North Dakota	959	922	1,016	1,091	1,106	1,125
Ohio	22,966	24,263	25,129	26,412	28,652	28,908
Oklahoma	73,328	77,729	82,431	83,034	84,425	77,154
Pennsylvania	23,438	21,831	19,540	11,977	14,271	13,255
South Dakota	33	33	30	24	17	27
Tennessee	N.A.	716	689	952	848	853
Texas	111,671	117,178	126,202	130,311	123,796	123,945
Utah	N.A.	217	348	519	853	824
Virginia	20	26	32	30	49	51
West Virginia	14,550	14,900	15,200	15,500	15,800	15,925
Wyoming	4,792	5,020	5,020	5,200	3,996	3,486
Total	416,493	441,501	452,543	458,447	460,429	451,787

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* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

U.S. STRIPPER WELL ABANDONMENTS BY STATE
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	--	--	0	19	1	1	8	2	9	3	14	2
Arizona	--	0	0	0	0	0	0	0	0	0	1	1
Arkansas	76	76	55	73	99	26	19	17	42	8	3	5
California	746	1,197	727	1,042	614	695	563	782	881	824	781	1,146
Colorado	103	105	141	84	99	75	94	57	42	40	31	37
Illinois	903	1,096	1,006	644	1,037	766	574	420	400	354	352	303
Indiana	118	96	108	127	100	154	97	97	44	72	262	201
Kansas	1,595	2,433	1,356	1,173	1,900	1,195	753	605	559	541	481	657
Kentucky	367	345	366	397	523	534	306	220	252	198	77	86
Louisiana	385	506	630	562	349	302	310	226	182	134	59	166
Michigan	91	127	95	102	71	51	31	34	47	42	33	61
Mississippi	24	34	25	16	22	15	21	29	173	113	58	60
Missouri	31	0	0	0	0	13	0	12	17	0	0	3
Montana	889	200	119	29	11	11	7	7	12	29	28	17
Nebraska	47	50	50	72	74	9	0	14	59	17	18	11
New Mexico	856	770	749	691	536	499	[illegible]	417	432	448	420	435
New York	629	419	573	544	622	553	442	455	352	117	119	161
North Dakota	3	13	78	5	2	4	4	3	6	5	4	4
Ohio	650	460	369	440	611	446	310	202	171	229	176	164
Oklahoma	2,705	2,273	1,604	1,737	1,869	1,739	881	793	656	623	596	644
Pennsylvania	1,376	3,824	1,632	1,951	346	434	1,421	1,034	899	1,229	809	733
South Dakota	--	0	0	0	4	1	0	1	2	6	3	2
Tennessee	0	0	12	7	6	9	6	5	13	6	7	11
Texas	3,860	4,265	3,682	3,884	4,608	5,716	3,177	3,057	2,599	2,268	1,938	1,948
Utah	3	6	6	25	26	39	47	56	54	62	10	12
Virginia	2	0	0	1	1	0	0	1	0	1	1	0
West Virginia	92	80	38	26	124	114	53	13	10	10	10	14
Wyoming	80	46	62	105	124	77	339	441	467	289	323	331
U.S. TOTAL	15,631	18,421	13,483	13,756	13,779	13,478	9,916	9,000	8,380	7,668	6,614	7,215

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section III
Table 21a

U.S. STRIPPER WELL ABANDONMENTS BY STATE
(As of January 1)

State	1983	1984	1985	1986	1987	1988
Alabama	4	1	3	1	2	7
Arizona	0	1	1	0	0	0
Arkansas	91	39	62	85	110	106
California	886	578	1,126	1,182	614	875
Colorado	N.A.	N.A.	36	94	98	224
Illinois	262	145	629	390	343	533
Indiana	425	428	366	387	392*	411*
Kansas	1,363	1,583	1,505	1,693	1,584	1,521
Kentucky	256	397	393	391	516	772
Louisiana	160	637	852	1,213	1,326*	1,267*
Michigan	N.A.	99	107	115	127*	170*
Mississippi	82	86	96	98	103*	137*
Missouri	61	0	N.A.	0	34	51*
Montana	55	N.A.	430	450	75	140
Nebraska	15	18	36	36	45	39
New Mexico	621	628	644	721	1,761	1,000
New York	249	70	140	226	449*	354
North Dakota	15	24	12	78	50	55
Ohio	226	297	354	612	291	343
Oklahoma	835	1,093	1,491	1,156	1,442	1,779
Pennsylvania	863	880	848	930	955*	996*
South Dakota	3	4	4	0	4	1
Tennessee	N.A.	N.A.	0	N.A.	N.A.	110
Texas	2,920	3,980	4,931	6,015	7,585	6,708
Utah	N.A.	24	22	75	89*	93*
Virginia	0	0	3	2	5*	1
West Virginia	34	20	79	74	24	38
Wyoming	N.A.	N.A.	N.A.	N.A.	1,204	510
U.S. TOTAL	9,426	11,032	14,170	16,024	19,233	18,241

N.A. = Not Available
* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section III
Table 22

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1970	1971	1972	1973	1974	1975	1976	1977	1978
Australia	386	402	398	394	373	361	378	359	375
Brunei-Malaysia	592	537	558	126	519	504	574	648	712
India	200	1,545	1,545	1,500	2,500	1,545	1,548	1,600	1,600
Indonesia	2,136	2,055	2,344	2,567	2,710	3,018	3,162	3,421	3,644
Japan	1,725	2,341	1,078	1,084	1,044	1,009	464	448	542
TOTAL ASIA-PACIFIC	5,200	7,046	6,692	6,479	6,861	7,156	6,645	7,006	7,407
Austria	1,268	1,298	1,270	1,250	1,271	1,291	1,222	1,219	1,250
Netherlands	369	351	319	319	347	368	392	393	416
Norway	--	1	4	4	6	24	29	36	50
United Kingdom	60	55	56	63	57	77	90	135	109
West Germany	3,065	3,078	2,833	2,782	2,699	2,699	2,827	2,933	2,933
TOTAL WESTERN EUROPE	5,243	5,217	4,807	5,869	5,916	5,981	6,109	6,266	5,208
Abu Dhabi	94	98	115	142	160	216	209	232	240
Iran	266	280	313	350	369	425	428	518	551
Iraq	113	122	132	133	156	156	170	200	250
Kuwait	741	692	692	692	692	692	596	586	586
Neutral Zone	450	480	440	362	449	449	476	459	455
Qatar	69	80	84	92	81	88	77	77	95
Saudi Arabia	423	425	535	627	670	711	701	754	875
TOTAL MIDDLE EAST	2,862	2,922	3,108	3,187	3,358	3,919	3,007	4,161	4,307
Algeria	775	497	524	574	826	984	826	801	989
Egypt	332	204	245	261	437	319	376	401	430
Gabon	100	101	114	122	137	184	212	240	211
Libya	1,083	995	763	895	979	851	877	797	817
Nigeria	364	570	774	898	1,088	1,052	1,259	1,374	1,322
TOTAL AFRICA	2,898	2,592	2,672	3,016	3,777	3,699	3,804	3,956	4,160
Mexico	3,127	3,908	3,412	4,345	3,301	3,285	3,382	3,419	4,145
Venezuela	9,364	9,360	11,245	12,461	12,450	10,718	10,720	1,932	11,909
United States	530,990	517,318	508,443	497,378	497,631	500,333	499,110	507,034	516,752
Canada	23,675	22,779	20,911	22,996	21,202	18,573	25,055	26,112	25,800
TOTAL WESTERN HEMIS.	582,649	569,172	558,947	551,543	548,894	546,866	574,224	555,034	575,695
TOTAL FREE WORLD	598,852	586,949	576,226	570,094	568,806	567,621	593,789	576,423	596,777

Source: United States, U.S. Department of Energy
Rest of World, Oil and Gas Journal

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1979	1980	1981	1982	1983	1984	1985	1986
Australia	370	403	399	435	509	545	746	879
Brunei-Malaysia	819	808	788	843	965	1,017	999	1,080
India	1,600	1,600	1,600	1,560	1,560	1,560	2,201	2,201
Indonesia	3,823	3,700	4,077	4,341	4,840	4,840	5,378	5,124
Japan	507	388	382	397	370	348	256	284
TOTAL ASIA-PACIFIC	7,684	7,465	7,843	8,184	8,885	8,992	10,381	10,374
Austria	1,254	1,120	1,164	1,229	1,240	1,243	1,605	1,069
Netherlands	473	480	516	533	623	633	644	663
Norway	50	100	117	131	144	171	178	178
United Kingdom	240	290	361	379	387	535	627	661
West Germany	2,945	2,957	3,004	3,077	3,142	3,136	3,152	3,129
TOTAL WESTERN EUROPE	5,421	5,401	5,708	5,978	6,228	6,922	7,509(1)	7,643(1)
Abu Dhabi	250	341	277	352	222	254	254	392
Iran	547	547	530	530	530	530	361	361
Iraq	250	250	280	280	290	290	NA	NA
Kuwait	590	590	546	530	530	530	572	363
Neutral Zone	423	412	450	445	450	464	493	493
Qatar	95	124	128	125	125	174	174	174
Saudi Arabia	725	733	782	555	555	555	NA	NA
TOTAL MIDDLE EAST	4,381	4,193	4,304	4,639	4,643	4,582	3,797(1)	3,875(1)
Algeria	970	1,000	1,050	1,085	1,090	1,090	NA	NA
Egypt	432	484	450	411	500	617	658	666
Gabon	218	242	250	266	270	270	297	500
Libya	896	886	889	891	905	905	671	661
Nigeria	1,457	1,451	1,491	1,312	1,296	1,177	1,153	1,111
TOTAL AFRICA	4,372	4,522	4,672	4,565	4,860	4,937	3,708(1)	3,838
Mexico	4,200	3,384	3,593	3,605	3,640	NA	3,209	3,737
Venezuela	12,486	5,042	13,610	14,029	11,604	13,512	10,103	10,103
United States	531,395	547,717	557,009	580,142	636,900	615,500	642,000	639,735
Canada	18,323	20,721	33,404	33,907	36,388	39,146	43,480	50,037
TOTAL WESTERN HEMIS.	583,748	594,741	625,056	650,162	708,342	690,169	721,857	727,218
TOTAL FREE WORLD	608,606	616,322	647,583	673,528	732,958	715,602(1)	747,252(1)	752,948(1)

NA Not Available
(1) Total is incomplete because figures for all countries are not available.

Source: United States, 1976-1980: U.S. Department of Energy
1981: World Oil Magazine
Rest of World, Oil and Gas Journal
1983-1986: Oil and Gas Journal

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1859	1	0	1	0	2	1
1860	201	0	39	0	240	202
1861	190	0	57	0	247	392
1862	322	0	63	0	385	713
1863	488	0	107	0	595	987
1864	951	0	181	0	1,132	1,303
1865	899	0	378	0	1,277	1,611
1866	795	0	347	0	1,142	1,885
1867	789	0	467	0	1,256	2,360
1868	862	0	202	0	1,064	2,946
1869	986	0	696	0	1,682	3,737
1870	1,002	0	637	0	1,639	4,363
1871	1,005	0	447	0	1,452	4,987
1872	768	0	398	0	1,166	5,271
1873	948	0	296	0	1,244	5,607
1874	1,002	0	302	0	1,304	5,958
1875	1,890	0	568	0	2,458	6,973
1876	2,631	0	329	0	2,960	8,960
1877	3,298	0	658	0	3,956	11,551
1878	2,660	0	328	0	2,988	13,536
1879	2,669	0	148	0	2,817	15,521
1880	4,022	0	144	0	4,216	18,634
1881	3,694	0	182	0	3,876	21,168
1882	3,092	0	179	0	3,271	22,258
1883	2,655	84	279	0	3,018	22,365
1884	2,094	1	270	0	2,365	21,083
1885	2,572	4	379	0	2,955	20,753
1886	3,340	0	968	0	4,308	20,963
1887	1,637	0	505	0	2,142	19,425
1888	1,750	45	491	0	2,286	18,453
1889	5,445	133	1,119	0	6,697	21,833
1890	7,342	50	1,439	0	8,831	27,341
1891	4,168	49	990	0	5,207	29,480
1892	3,090	3	785	0	3,878	31,059
1893	3,474	3	799	0	4,276	32,339
1894	6,138	18	1,493	0	7,649	36,841
1895	10,838	8	2,404	0	13,250	45,784
1896	11,219	14	2,784	0	14,017	54,319
1897	7,571	7	2,237	0	9,815	57,591
1898	7,058	16	1,823	0	8,897	61,288
1899	11,630	22	2,701	0	14,353	69,673

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1900	13,671	17	3,389	0	17,077	78,745
1901	11,811	10	3,276	0	15,097	85,111
1902	13,019	15	3,440	0	16,474	92,371
1903	15,177	322	3,670	0	19,169	101,182
1904	16,008	449	4,088	0	20,545	110,928
1905	12,601	382	3,583	0	16,566	115,943
1906	14,550	493	3,787	0	18,830	122,590
1907	15,534	555	3,579	0	17,668	133,040
1908	13,210	485	3,214	0	16,909	141,453
1909	13,785	1,048	3,404	0	18,327	146,736
1910	11,018	1,500	2,422	0	14,940	148,619
1911	9,825	1,580	2,363	0	13,768	150,793
1912	12,514	1,811	2,855	0	17,180	155,046
1913	19,101	2,207	4,282	0	25,590	170,774
1914	16,668	2,327	4,142	0	23,137	180,177
1915	9,154	2,022	2,981	0	14,157	181,317
1916	18,777	1,803	4,039	0	24,619	192,108
1917	16,590	1,966	4,851	0	23,407	199,319
1918	17,845	2,229	5,613	0	25,687	207,815
1919	21,052	2,135	5,986	0	29,173	228,084
1920	24,273	2,174	7,364	0	33,911	268,247
1921	14,666	2,111	5,160	0	21,937	274,500
1922	17,333	2,024	5,332	0	24,689	284,880
1923	16,206	2,367	5,865	0	24,438	290,100
1924	14,587	2,257	5,044	0	21,888	299,100
1925	16,559	2,330	6,734	0	25,623	306,100
1926	19,013	2,341	7,965	0	29,319	318,600
1927	14,442	2,491	7,210	0	24,143	323,300
1928	12,526	2,727	7,078	0	22,331	327,800
1929	15,572	2,870	7,914	0	26,356	328,200
1930	11,640	2,866	6,734	0	21,240	331,070
1931	6,788	1,985	3,659	0	12,432	315,850
1932	10,444	1,027	3,569	0	15,040	321,500
1933	8,068	932	3,312	0	12,312	326,850
1934	12,520	1,368	4,309	0	18,197	333,070
1935	14,663	1,401	4,911	445(1)	21,420	340,990
1936	17,800	2,070	5,297	723	25,890	349,450
1937	22,386	2,676	6,560	1,453	33,075	363,030
1938	18,598	2,066	6,141	688	27,493	369,640
1939	17,625	2,198	6,474	1,420	27,717	380,390

(1) Not available prior to 1935.

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section III
Table 23b

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1940	19,125	2,352	6,617	1,947	30,041	389,010
1941	19,552	3,007	7,128	2,366	32,053	399,960
1942	10,492	2,068	5,504	1,760	19,824	404,840
1943	9,717	1,782	6,385	1,547	19,431	407,170
1944	13,028	3,067	7,009	2,156	25,260	412,220
1945	14,297	2,898	7,471	2,209	26,875	415,750
1946	15,851	3,090	8,047	2,237	29,225	421,460

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

BASIC PETROLEUM DATA BOOK

SECTION IV. PRODUCTION

Table 1. World Crude Oil Production by Area

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Section IV
Table 1

WORLD CRUDE OIL PRODUCTION BY AREA
(Thousands of barrels)

Year	United States(1)	Canada	Latin America	Western Europe	Middle East	Africa	Asia	Total Free World	Communist Nations	Total World
1947	1,856,987	7,692	574,170	12,873	306,320	8,649	24,568	2,791,259	230,880	3,022,139
1948	2,020,185	12,287	633,568	13,114	416,780	13,499	55,878	3,165,311	267,923	3,433,234
1949	1,841,940	21,305	634,560	17,651	511,507	16,135	74,518	3,117,616	286,526	3,404,142
1950	1,973,574	29,044	716,655	25,310	640,862	16,702	86,883	3,489,030	313,997	3,803,027
1951	2,247,711	47,615	804,154	33,696	700,643	16,947	101,218	3,951,984	330,746	4,282,730
1952	2,289,836	61,237	843,522	40,533	760,599	17,561	108,981	4,122,269	408,845	4,531,114
1953	2,357,082	80,899	828,792	47,922	884,736	17,900	121,377	4,338,708	459,347	4,798,055
1954	2,314,988	96,080	893,403	55,101	998,932	15,225	127,637	4,501,366	515,225	5,016,591
1955	2,484,428	129,440	1,000,431	64,625	1,185,519	13,837	138,682	5,016,962	608,697	5,625,659
1956	2,617,283	171,981	1,127,925	72,556	1,260,610	13,224	145,824	5,409,403	715,273	6,124,676
1957	2,616,901	181,848	1,257,309	83,429	1,293,099	18,102	166,631	5,617,319	821,125	6,438,444
1958	2,449,016	165,496	1,214,520	87,345	1,558,351	31,713	169,824	5,676,265	931,485	6,607,750
1959	2,574,590	184,778	1,300,922	94,248	1,684,636	41,943	193,308	6,074,425	1,058,813	7,133,238
1960	2,574,933	189,534	1,365,594	105,494	1,923,285	105,308	202,312	6,466,460	1,208,000	7,674,460
1961	2,621,758	220,861	1,425,418	114,777	2,055,933	178,613	201,992	6,819,352	1,366,861	8,186,213
1962	2,676,189	244,136	1,550,492	122,104	2,257,951	293,384	218,028	7,362,284	1,519,574	8,881,858
1963	2,752,723	257,662	1,583,086	130,085	2,486,348	434,311	221,610	7,865,825	1,672,521	9,538,346
1964	2,786,822	275,364	1,644,429	142,517	2,786,199	623,586	228,802	8,487,719	1,821,925	10,309,644
1965	2,848,514	296,997	1,681,936	146,199	3,053,941	811,692	245,755	9,085,034	1,977,481	11,062,515
1966	3,027,763	320,467	1,670,315	143,921	3,408,361	1,029,674	256,221	9,856,722	2,165,064	12,021,786
1967	3,215,742	351,287	1,783,731	142,864	3,667,393	1,137,566	288,195	10,586,778	2,327,562	12,914,340
1968	3,329,042	435,906	1,835,054	141,073	4,135,044	1,460,968	338,381	11,675,468	2,470,850	14,146,318
1969	3,371,751	410,814	1,865,248	139,369	4,542,994	1,850,355	403,080	12,583,611	2,638,900	15,222,511
1970	3,517,450	461,177	1,916,188	136,626	5,094,380	2,215,237	502,812	13,843,870	2,874,838	16,718,708
1971	3,453,914	491,846	1,866,791	131,862	5,979,115	2,060,359	580,114	14,564,001	3,098,792	17,662,793
1972	3,455,368	560,693	1,787,957	138,479	6,630,500	2,085,873	690,986	15,349,856	3,250,889	18,600,745
1973	3,360,903	648,348	1,894,715	138,513	7,744,933	2,161,473	815,845	16,764,730	3,603,251	20,367,981
1974	3,202,585	616,532	1,788,690	142,005	7,986,831	1,989,898	816,030	16,542,571	3,995,156	20,537,727

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(1) Includes lease condensate

Source: U.S. Department of the Interior, Bureau of Mines-1947-1958: Minerals Yearbook, Annual
1959-1972: International Petroleum Annual
1973-1974: World Crude Oil Production Annual 1974, July 17, 1975

Section IV
Table 1a

WORLD CRUDE OIL PRODUCTION BY AREA
(Thousands of barrels)

Year	United States(1)	Canada	Latin America	Western Europe	Middle East	Africa	Asia	Total Free World	Communist Nations	Total World
1975	3,056,779	520,666	1,603,333	199,950	7,160,993	1,826,255	806,329	15,174,305	4,328,030	19,502,335
1976	2,976,180	488,680	1,625,069	311,858	8,115,708	2,134,861	922,818	16,575,174	4,616,366	21,191,540
1977	3,009,265	482,021	1,647,362	489,328	8,186,851	2,276,007	1,017,244	17,108,078	4,792,617	21,900,695
1978	3,175,927	483,260	1,736,427	643,149	7,884,927	2,233,791	1,037,520	17,195,001	4,963,250	22,158,251
1979	3,121,310	546,040	1,919,535	828,550	7,868,670	2,423,600	1,051,200	17,758,905	5,118,030	22,876,935
1980	3,146,365	521,184	2,035,692	890,965	6,735,498	2,226,378	1,000,278	16,556,360	5,204,520	21,760,880
1981	3,128,624	469,025	2,182,700	955,570	5,749,480	1,672,065	1,027,110	15,184,574	5,192,125	20,376,699
1982	3,156,715	463,550	2,256,065	1,078,210	4,622,360	1,629,725	955,570	14,162,195	5,184,460	19,346,655
1983	3,170,999	494,940	2,203,505	1,236,620	4,215,750	1,609,650	1,024,555	13,956,019	5,241,400	19,197,419
1984	3,249,696	516,426	2,315,682	1,331,874	4,128,114	1,713,978	1,164,978	14,420,748	5,332,620	19,753,368
1985	3,274,553	531,805	2,284,900	1,369,480	3,761,325	1,772,075	1,142,450	14,136,588	5,352,360	19,488,948
1986	3,168,252	537,280	2,190,000	1,395,030	4,639,150	1,819,890	1,176,760	14,926,362	5,402,730	20,329,092
1987	3,047,378	569,400	2,200,220	1,377,510	4,603,015	1,734,845	1,141,355	14,674,723	5,469,160	20,142,883

(1) Includes lease condensate.

Source: 1975-1978: U.S. Department of Energy, Energy Information Administration, World Crude Oil Production Annual
1979-1987: U.S.--U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual
Rest of World--Central Intelligence Agency, International Energy Statistical Review

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1974	Nation	1975	Nation	1976
1. U.S.S.R.(1)	3,373,650	1. U.S.S.R.(1)	3,608,850	1. U.S.S.R.(1)	3,822,000
2. United States(1)	3,202,585	2. United States(1)	3,052,048	2. Saudi Arabia(2)	3,053,887
3. Saudi Arabia(2)	2,996,543	3. Saudi Arabia(2)	2,491,834	3. United States(1)	2,976,180
4. Iran	2,197,901	4. Iran	1,952,650	4. Iran	2,168,237
5. Venezuela	1,086,332	5. Venezuela	856,364	5. Venezuela	839,737
6. Kuwait(2)	830,580	6. Iraq	825,521	6. Iraq	834,810
7. Nigeria	823,347	7. Kuwait(2)	670,918	7. Nigeria	756,064
8. Iraq	720,729	8. Nigeria	651,890	8. Libya	704,011
9. Canada	616,532	9. United Arab Emirates	618,310	9. Kuwait(2)	700,000
10. United Arab Emirates	616,485	10. People's Republic of China	571,590	10. United Arab Emirates	692,106
11. Libya	555,291	11. Libya	551,150	11. People's Republic of China	645,897
12. Indonesia	501,838	12. Canada	520,666	12. Indonesia	550,319
13. People's Republic of China	474,500	13. Indonesia	477,055	13. Canada	488,680
14. Algeria	368,139	14. Algeria	350,753	14. Algeria	383,816
15. Mexico(1)	238,271	15. Mexico	294,254	15. Mexico	327,285
16. Qatar	189,348	16. Qatar	159,482	16. Qatar	178,120
17. Argentina	151,110	17. Australia	149,873	17. Australia	152,522
18. Australia	140,396	18. Argentina	144,364	18. Argentina	145,561
19. Romania	107,964	19. Oman	124,600	19. Oman	133,795
20. Oman	106,046	20. Romania	108,739	20. Egypt	120,180
TOTAL FREE WORLD	16,542,571	TOTAL FREE WORLD	15,169,574	TOTAL FREE WORLD	16,575,174
TOTAL WORLD	20,537,727	TOTAL WORLD	19,497,604	TOTAL WORLD	21,191,540

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(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: U.S. Energy Information Administration, World Crude Oil Production Annual

Section IV
Table 2a

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1977	Nation	1978	Nation	1979
1. U.S.S.R.(1)	3,991,050	1. U.S.S.R.	4,093,475	1. U.S.S.R.	4,187,280
2. Saudi Arabia(2)	3,290,000	2. United States(1)	3,175,927	2. Saudi Arabia	3,376,615
3. United States(1)	3,009,265	3. Saudi Arabia(2)	3,113,470	3. United States(1)	3,114,545
4. Iran	2,080,051	4. Iran	1,900,555	4. Iraq	1,269,105
5. Iraq	909,945	5. Iraq	959,585	5. Iran	1,156,320
6. Venezuela	816,818	6. Venezuela	790,418	6. Venezuela	859,940
7. Nigeria	765,473	7. People's Republic of China	731,825	7. Nigeria	840,230
8. Libya	753,178	8. Libya	727,445	8. Kuwait	807,745
9. United Arab Emirates	729,506	9. Nigeria	697,150	9. People's Republic of China	774,530
10. People's Republic of China	653,350	10. Kuwait(2)	680,725	10. Libya	763,580
11. Kuwait(2)	650,795	11. United Arab Emirates	668,680	11. United Arab Emirates	668,315
12. Indonesia	615,123	12. Indonesia	597,505	12. Indonesia	580,715
13. Canada	482,021	13. Canada(1)	483,260	13. United Kingdom	572,320
14. Algeria	409,864	14. Algeria(1)	447,125	14. Canada(1)	546,040
15. Mexico	358,090	15. Mexico(1)	440,555	15. Mexico(1)	533,265
16. United Kingdom	271,653	16. United Kingdom	394,930	16. Algeria(1)	415,005
17. Qatar	162,316	17. Qatar	176,537	17. Neutral Zone	207,320
18. Argentina	157,248	18. Neutral Zone	170,090	18. Egypt	191,625
19. Australia	157,155	19. Egypt	169,360	19. Brunei-Malaysia	187,975
20. Egypt	150,925	20. Argentina	165,195	20. Qatar	185,420
TOTAL FREE WORLD	17,108,078	TOTAL FREE WORLD	17,195,001	TOTAL FREE WORLD	17,825,515
TOTAL WORLD	21,900,695	TOTAL WORLD	22,158,251	TOTAL WORLD	22,970,545

(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: 1977-1978-U.S. Energy Information Administration, World Crude Oil Production Annual.
1979-Central Intelligence Agency, International Energy Statistical Review.

Section IV
Table 2b

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1980	Nation	1981	Nation	1982
1. U.S.S.R.	4,282,200	1. U.S.S.R.	4,303,350	1. U.S.S.R.	4,388,760
2. Saudi Arabia(2)	3,524,946	2. Saudi Arabia(2)	3,513,125	2. United States(1)	3,156,715
3. United States(1)	3,146,502	3. United States(1)	3,128,780	3. Saudi Arabia(2)	2,304,975
4. Iraq	920,124	4. Mexico(1)	843,880	4. Mexico	1,086,970
5. Venezuela	792,390	5. Venezuela	769,420	5. Iran	808,110
6. People's Republic of China	775,188	6. People's Republic of China	738,760	6. United Kingdom	772,705
7. Nigeria	753,228	7. United Kingdom	661,015	7. China	740,585
8. Mexico(1)	708,942	8. Indonesia	585,640	8. Venezuela	690,215
9. Libya	669,780	9. United Arab Emirates	547,500	9. Indonesia	488,735
10. United Arab Emirates	622,932	10. Nigeria	527,425	10. Nigeria	472,675
11. Iran	680,292	11. Iran	504,065	11. Canada	452,965
12. United Kingdom	592,554	12. Canada(1)	469,025	12. United Arab Emirates	443,110
13. Indonesia	576,816	13. Libya	415,005	13. Libya	422,670
14. Canada(1)	521,184	14. Iraq	362,445	14. Iraq	354,780
15. Kuwait(2)	508,374	15. Kuwait(2)	345,655	15. Algeria	259,150
16. Algeria(1)	373,320	16. Algeria	293,095	16. Kuwait(2)	244,915
17. Egypt	217,770	17. Egypt	218,270	17. Egypt	242,725
18. Neutral Zone	199,104	18. Norway	182,865	18. Norway	189,070
19. Norway	193,248	19. Argentina	181,040	19. Argentina	176,660
20. Brunei-Malaysia	189,588	20. Brunei-Malaysia	156,585	20. Brunei-Malaysia	167,900
TOTAL FREE WORLD	16,559,304	TOTAL FREE WORLD	15,181,445	TOTAL FREE WORLD	14,116,160
TOTAL WORLD	21,765,654	TOTAL WORLD	20,373,570	TOTAL WORLD	19,395,155

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(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: Central Intelligence Agency, International Energy Statistical Review

Section IV
Table 2c

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

	Nation	1983		Nation	1984		Nation	1985
1.	U.S.S.R.	4,363,940	1.	U.S.S.R.	4,344,420	1.	U.S.S.R.	4,288,385
2.	United States(1)	3,170,999	2.	United States(1)	3,249,696	2.	United States(1)	3,274,553
3.	Saudi Arabia (2)	1,776,455	3.	Saudi Arabia(2)	1,626,504	3.	Saudi Arabi(2)	1,200,850
4.	Mexico	979,660	4.	Mexico	1,005,036	4.	Mexico	997,545
5.	Iran	909,580	5.	United Kingdom	927,810	5.	United Kingdom	924,545
6.	United Kingdom	839,135	6.	China	834,480	6.	China	911,040
7.	China	769,005	7.	Iran	800,442	7.	Iran	824,170
8.	Venezuela	653,350	8.	Venezuela	663,558	8.	Venezuela	591,665
9.	Canada	529,250	9.	Indonesia	536,556	9.	Nigeria	534,360
10.	Indonesia	505,525	10.	Canada	516,426	10.	Canada	531,805
11.	Nigeria	452,965	11.	Nigeria	509,838	11.	Iraq	524,505
12.	United Arab Emirates	408,070	12.	Iraq	440,298	12.	Indonesia	450,775
13.	Libya	392,740	13.	United Arab Emirates	401,502	13.	United Arab Emirates	418,290
14.	Iraq	336,530	14.	Libya	392,718	14.	Libya	390,185
15.	Kuwait(2)	321,565	15.	Kuwait(2)	333,792	15.	Egypt	319,010
16.	Algeria	255,135	16.	Egypt	302,682	16.	Kuwait(2)	314,630
17.	Egypt	251,485	17.	Norway	256,200	17.	Norway	286,525
18.	Norway	224,110	18.	Algeria	233,508	18.	Algeria	235,425
19.	Brunei-Malaysia	190,895	19.	India	173,248	19.	India	224,475
20.	Argentina	174,835	20.	Australia	180,072	20.	Brazil	211,700
TOTAL FREE WORLD		13,988,260	TOTAL FREE WORLD		14,420,748	TOTAL FREE WORLD		14,136,588
TOTAL WORLD		19,274,555	FREE WORLD		19,753,368	TOTAL WORLD		19,488,948

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(1) Includes lease condensate.
(2) Excludes Neutral Zone production.

Source: U.S. - Energy Information Administration, Petroleum Supply Annuals
Rest of World - Central Intelligence Agency, International Energy Statistical Review

Section IV
Table 2d

WORLD CRUDE OIL PRODUCTION--TWENTY LEADING NATIONS
(Thousands of Barrels)

Nation	1986	Nation	1987
1. U.S.S.R.	4,290,210	1. U.S.S.R.	4,354,450
2. United States(1)	3,168,252	2. United States(1)	3,047,378
3. Saudi Arabia(2)	1,795,070	3. Saudi Arabia	1,484,455
4. China	953,745	4. China	953,745
5. United Kingdom	915,420	5. Mexico	927,465
6. Mexico	887,315	6. Iran	894,616
7. Iran	710,290	7. United Kingdom	853,370
8. Iraq	626,340	8. Iraq	757,740
9. Venezuela	575,240	9. Venezuela	573,780
10. Canada	537,280	10. Canada	569,400
11. Nigeria	533,265	11. United Arab Emirates	530,710
12. Kuwait(2)	490,560	12. Nigeria	469,390
13. United Arab Emirates	485,815	13. Indonesia	434,715
14. Indonesia	461,360	14. Kuwait	377,410
15. Libya	415,005	15. Norway	344,195
16. Norway	306,965	16. Egypt	277,040
17. Egypt	296,745	17. Algeria	231,775
18. Algeria	244,915	18. India	222,285
19. India	228,125	19. Brazil	206,590
20. Brazil	209,875	20. Oman	203,305
TOTAL FREE WORLD	14,926,362	TOTAL FREE WORLD	14,858,413
TOTAL WORLD	20,329,092	TOTAL WORLD	20,345,823

(1) Includes lease condensate.
(2) Excludes Neutral Zone production.

Source: U.S.--U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.
Rest of World--Central Intelligence Agency, International Energy Statistical Review.

Section IV
Table 3

U.S. STRIPPER WELLS AND STRIPPER WELL PRODUCTION

Year	Number of Stripper Wells (as of Dec. 31)	Total Production from Stripper Wells (000 barrels)	Average Production Per Well (B/D)	Total(1) U.S. Crude Oil Production (000 barrels)	Stripper Percent of Total Production
1947	294,672	279,659	2.6	1,856,987	15.1
1948	310,892	352,899	3.1	2,020,185	17.5
1949	313,970	350,871	3.1	1,841,940	19.0
1950	321,287	375,551	3.2	1,973,574	19.0
1951	320,689	341,241	2.9	2,247,711	15.2
1952	332,058	374,175	3.1	2,289,836	16.3
1953	332,552	383,947	3.2	2,357,082	16.3
1954	340,276	432,496	3.5	2,314,988	18.7
1955	357,931	463,702	3.5	2,484,428	18.7
1956	370,489	485,637	3.6	2,617,283	18.6
1957	372,519	474,919	3.5	2,616,901	18.1
1958	373,870	511,842	3.8	2,449,016	20.9
1959	392,535	533,470	3.7	2,574,590	20.7
1960	403,323	577,151	3.9	2,574,933	22.4
1961	406,102	591,911	4.0	2,621,758	22.6
1962	406,051	579,410	3.9	2,676,189	21.7
1963	401,031	555,130	3.8	2,752,723	20.2
1964	394,107	534,567	3.7	2,786,822	19.9
1965	398,299	589,016	4.0	2,848,514	20.7
1966	380,549	485,166	3.5	3,027,763	16.0
1967	376,851	499,601	3.6	3,215,742	15.5
1968	367,205	485,162	3.6	3,329,042	14.6
1969	358,650	454,820	3.5	3,371,751	13.5
1970	359,130	441,287	3.4	3,517,450	12.5
1971	353,696	423,322	3.6	3,453,914	12.3
1972	359,471	411,925	3.1	3,455,368	11.9
1973	355,229	385,684	3.0	3,360,903	11.5
1974	366,095	411,936	3.1	3,202,585	12.9
1975	367,872	394,163	2.9	3,056,779	12.9
1976	365,733	392,191	2.9	2,976,180	13.2
1977	368,930	392,532	2.9	2,985,360	13.1
1978	374,635	391,633	2.9	3,178,216	12.3
1979	386,310	394,405	2.8	3,121,310	12.6
1980	395,176	401,095	2.8	3,146,519	12.7
1981	409,539	426,502	2.9	3,128,624	13.1
1982	416,493	441,951	2.9	3,156,715	14.0
1983	441,501	462,013	2.9	3,159,440	14.6
1984	452,543	463.459	2.8	3,249,696	14.3

(1) Includes lease condensate

Source: National Stripper Well Survey
Total Crude Oil Production, Department of Energy

U.S. STRIPPER WELLS AND STRIPPER WELL PRODUCTION

Year	Number of Stripper Wells (as of Dec. 31)	Total Production from Stripper Wells (000 barrels)	Average Production Per Well (B/D)	Total(1) U.S. Crude Oil Production (000 barrels)	Stripper Percent of Total Production
1985	458,447	455,884	2.7	3,274,553	13.9
1986	460,426	449,446	2.7	3,168,252	14.5
1987	451,787	446,837	2.7	3,047,378	14.7

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(1) Includes lease condensate.

Source: Stripper Well data from National Stripper Well Association, National Stripper Well Survey.
Total U.S. Crude Oil Production from Department of Energy, Energy Information Administration.

Section IV
Table 4

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Alabama	396	466	462	735	1,020	1,279	1,694	1,584	1,411	3,069
Alaska	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-
Arkansas	29,948	31,682	29,986	31,108	29,798	29,440	29,681	29,130	28,369	29,355
California	333,132	340,074	332,942	327,607	354,561	359,450	365,085	355,865	354,812	350,754
Colorado	15,702	17,862	23,587	23,303	27,823	30,381	36,402	46,206	52,653	58,516
Florida	259	290	441	487	596	591	543	548	495	479
Illinois	66,459	64,808	64,501	62,028	60,243	60,089	59,026	66,798	81,423	82,346
Indiana	6,095	6,974	9,696	10,699	11,100	12,037	12,823	11,204	10,988	11,513
Kansas	105,132	110,908	101,868	107,586	114,522	114,807	114,566	119,317	121,669	124,204
Kentucky	9,397	8,801	8,803	10,381	11,622	11,918	11,518	13,791	15,518	17,628
Louisiana	160,128	181,458	190,826	208,965	232,281	243,929	256,632	246,558	271,010	299,421
Michigan	16,215	16,871	16,517	15,826	13,927	13,251	12,285	12,028	11,266	10,740
Mississippi	34,925	45,761	37,966	38,236	37,039	36,310	35,620	34,240	37,741	40,824
Missouri	55	31	49	32	24	21	39	96	72	65
Montana	8,742	9,382	9,118	8,109	8,958	9,606	11,920	14,195	15,654	21,760
Nebraska	229	215	330	1,547	2,558	2,660	6,344	7,783	11,203	16,204
Nevada	-	-	-	-	-	-	-	33	64	64
New Mexico	40,926	47,969	47,645	47,367	52,719	58,681	70,441	74,820	82,958	87,893
New York	4,762	4,621	4,425	4,143	4,254	4,242	3,800	3,257	2,904	2,748
North Dakota	-	-	-	-	25	1,549	5,183	6,025	11,143	13,495
Ohio	3,108	3,600	3,483	3,383	3,140	3,350	3,610	3,880	4,353	4,785
Oklahoma	141,019	154,455	151,660	164,599	186,869	190,435	202,570	185,851	202,817	215,862
Pennsylvania	12,690	12,667	11,374	11,859	11,345	11,233	10,649	9,107	8,531	8,230
South Dakota	-	-	-	-	-	-	-	37	30	32
Tennessee	8	19	18	12	14	15	16	13	13	9
Texas	820,210	903,498	744,834	829,874	1,010,270	1,022,139	1,019,164	974,275	1,053,297	1,107,808
Utah	-	16	637	1,228	1,305	1,737	1,807	1,905	2,227	2,466
Virginia	61	33	43	21	12	10	8	7	4	4
Washington	-	-	-	-	-	-	-	-	-	-
West Virginia	2,617	2,692	2,839	2,808	2,757	2,602	3,038	2,902	2,320	2,179
Wyoming	44,772	55,032	47,890	61,631	68,929	68,074	82,618	93,533	99,483	104,830
Total(Mb)	1,857.0	2,020.2	1,841.9	1,973.6	2,247.7	2,289.8	2,357.1	2,315.0	2,484.4	2,617.3
Daily Ave(Mb)	5.1	5.5	5.0	5.4	6.2	6.3	6.5	6.3	6.8	7.2

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(1) Includes Lease Condensate

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section IV
Table 4a

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Alabama	5,406	5,887	5,524	7,329	6,931	7,473	9,175	8,498	8,064	8,030
Alaska	-	-	187	559	6,327	10,259	10,740	11,059	11,128	14,358
Arizona	-	12	25	73	73	39	68	64	97	132
Arkansas	31,047	28,700	26,329	30,117	29,246	27,649	27,406	26,737	25,930	23,824
California	339,646	313,672	308,946	305,352	299,609	296,590	300,908	300,009	316,428	345,295
Colorado	54,982	48,736	46,440	47,469	46,759	42,477	38,283	34,755	33,511	33,492
Florida	461	449	424	369	374	419	464	620	1,464	1,799
Illinois	77,083	80,275	76,727	77,341	76,818	78,796	74,796	70,168	63,708	61,661
Indiana	12,662	11,864	11,554	12,054	11,500	12,077	11,902	11,283	11,481	10,617
Kansas	123,614	119,942	119,543	113,453	112,241	112,076	109,107	106,252	104,733	103,738
Kentucky	17,029	17,509	27,272	21,147	18,344	17,789	18,344	19,772	19,386	18,066
Louisiana	329,896	313,891	362,666	400,832	424,962	477,153	515,057	549,698	594,853	674,318
Michigan	10,169	9,308	10,439	15,899	18,901	17,114	15,972	15,601	14,728	14,273
Mississippi	38,922	39,512	49,620	51,673	54,688	55,713	58,619	56,777	56,183	55,227
Missouri	65	84	75	75	72	55	53	65	73	97
Montana	27,172	27,957	29,857	30,240	30,906	31,648	30,870	30,647	32,778	35,380
Nebraska	19,586	20,373	22,881	23,825	24,369	24,894	21,846	19,113	17,216	13,850
Nevada	44	40	32	27	154	141	118	255	209	307
New Mexico	94,759	98,515	105,692	107,380	112,553	109,328	109,941	113,863	119,166	124,154
New York	2,677	1,763	1,970	1,813	1,658	1,589	1,679	1,874	1,632	1,735
North Dakota	13,259	14,259	17,824	21,992	23,652	25,181	25,030	25,731	26,350	27,126
Ohio	5,478	6,260	5,978	5,405	5,639	5,835	6,039	15,859	12,908	10,899
Oklahoma	214,661	200,699	198,090	192,913	193,081	202,732	201,962	202,524	203,441	224,839
Pennsylvania	8,179	6,472	6,170	6,009	5,643	5,302	5,083	5,113	4,922	4,337
South Dakota	54	58	151	281	233	169	215	247	219	239
Tennessee	7	7	6	20	17	14	16	10	11	7
Texas	1,073,867	940,166	971,978	927,479	939,191	943,328	977,835	989,525	1,057,706	1,056,706
Utah	4,367	24,811	39,959	37,594	33,118	31,029	33,435	28,575	25,298	24,112
Virginia	5	4	6	2	2	3	3	6	4	1
Washington	5	4	1	1	-	-	-	-	-	-
West Virginia	2,215	2,186	2,184	2,300	2,760	3,470	3,350	3,370	3,530	3,674
Wyoming	109,584	115,572	126,050	133,910	141,937	135,847	144,407	138,752	138,314	134,470
Total(Mb)	2,617.0	2,449.0	2,574.6	2,575.0	2,621.8	2,676.2	2,752.7	2,786.8	2,848.5	3,027.8
Daily Ave(Mb)	7.2	6.2	7.1	7.0	7.2	7.3	7.5	7.6	7.8	8.3

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(1) Includes Lease Condensate

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section IV
Table 4b

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	7,348	7,635	7,701	7,263	7,832	9,934	11,677	13,323	13,477	14,706
Alaska	29,126	66,204	73,953	83,616	79,494	72,893	72,323	70,603	69,834	63,398
Arizona	2,924	3,370	2,433	1,784	1,236	993	804	740	635	519
Arkansas	21,075	19,464	18,049	18,035	18,263	18,519	18,016	16,527	16,133	18,097
California	359,219	375,496	375,291	372,191	358,484	347,022	336,075	323,003	322,199	326,021
Colorado	33,905	31,937	28,294	24,723	27,391	32,015	36,590	37,508	38,089	38,992
Florida	1,568	1,474	1,731	2,999	5,347	16,897	32,695	36,351	41,877	44,460
Illinois	59,142	56,391	50,724	43,747	38,084	34,874	30,669	27,553	26,067	26,272
Indiana	10,081	8,692	7,841	7,487	6,658	6,130	5,312	4,919	4,632	4,630
Kansas	99,200	94,505	88,716	84,853	78,532	73,744	66,227	61,691	59,106	58,714
Kentucky	15,535	14,036	12,924	11,575	10,692	9,702	8,687	7,837	7,556	7,483
Louisiana	774,527	817,426	844,603	906,907	935,243	891,827	831,524	737,324	650,840	606,501
Michigan	13,664	12,974	12,213	11,693	11,893	12,990	14,614	18,021	24,420	30,421
Mississippi	57,147	58,708	64,283	65,119	64,066	61,100	56,102	50,779	46,614	46,072
Missouri	75	65	67	66	66	60	60	56	57	61
Montana	34,959	48,460	43,954	37,879	34,599	33,904	34,620	34,554	32,844	32,814
Nebraska	13,373	13,183	12,106	11,451	10,062	8,705	7,240	6,611	6,120	6,182
Nevada	279	271	223	149	113	100	96	129	115	143
New Mexico	126,144	128,550	129,227	128,184	118,412	110,525	100,986	98,695	95,063	92,130
New York	1,972	1,532	1,256	1,194	1,126	1,018	967	896	875	857
North Dakota	25,315	25,040	22,703	21,998	21,653	20,624	20,235	19,697	20,452	21,725
Ohio	9,924	11,204	10,972	9,864	8,286	9,358	8,796	9,088	9,578	9,994
Oklahoma	230,749	221,623	224,729	223,574	213,313	207,633	191,204	177,785	163,123	161,426
Pennsylvania	4,387	4,160	4,448	4,093	3,798	3,441	3,282	3,478	3,264	3,019
South Dakota	211	187	158	160	233	219	275	494	472	447
Tennessee	7	6	32	309	398	198	201	769	682	598
Texas	1,119,962	1,133,380	1,151,775	1,249,697	1,222,926	1,301,686	1,294,671	1,262,126	1,221,929	1,189,523
Utah	24,048	23,504	23,295	23,370	23,630	26,570	32,656	39,363	42,301	34,304
Virginia	3	3	1	1	1	-	-	3	3	3
Washington	-	-	-	-	-	-	-	-	-	-
West Virgini	3,561	3,312	3,104	3,124	2,969	2,677	2,385	2,665	2,479	2,519
Wyoming	136,312	144,250	154,945	160,345	148,114	140,011	141,914	139,997	135,943	134,149
Total(Mb)	3,215.7	3.329.0	3,371.8	3,517.5	3,453.9	3,455.4	3,360.9	3,202.6	3,056.8	2,976.2
Daily Ave(Mb)	8.8	9.1	9.2	9.6	9.5	9.4	9.2	8.8	8.4	8.1

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(1) Includes lease condensate.

Source: U.S. Department of Interior, Bureau of Mines, Annual Petroleum Statements
U.S. Energy Information Administration, Annual Petroleum Statements

Section IV
Table 4c

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousands of Barrels)

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Alabama	18,252	19,829	19,161	22,153	20,680	20,014	18,746	19,804	21,581	21,122
Alaska	169,201	448,620	511,335	591,646	587,337	618,910	625,527	630,401	666,233	681,310
Arizona	427	418	472	406	357	335	237	215	175	161
Arkansas	20,202	20,329	18,869	18,210	18,352	18,849	18,849	18,730	19,044	15,778
California	349,609	347,181	352,268	356,923	384,958	401,572	404,688	412,020	423,877	406,665
Colorado	39,460	36,797	32,324	29,802	30,303	30,545	29,050	28,845	30,246	29,309
Florida	46,641	47,536	47,168	42,886	34,773	25,626	19,476	14,462	11,458	9,383
Illinois	25,608	23,362	21,793	22,702	24,090	27,710	29,200	28,868	30,265	27,245
Indiana	5,314	4,689	4,715	4,978	4,721	5,563	5,321	5,526	5,168	4,759
Kansas	57,496	56,586	56,995	60,151	65,810	70,525	71,594	75,729	75,407	67,034
Kentucky	6,581	5,724	5,514	5,946	6,548	7,349	7,886	7,777	7,790	6,475
Louisiana	562,905	532,740	489,687	469,141	449,315	458,395	479,569	515,268	508,239	512,108
Michigan	32,965	34,667	34,862	33,808	32,665	31,462	31,736	30,554	27,300	25,688
Mississippi	43,022	42,024	37,327	35,945	34,204	33,047	31,455	32,776	30,641	29,997
Missouri	60	54	91	130	226	202	269	285	243	110
Montana	32,680	30,467	29,957	29,584	30,813	30,921	29,225	29,761	29,768	27,072
Nebraska	5,968	5,862	6,068	6,240	6,671	6,872	6,380	6,452	6,943	7,098
Nevada	661	1,156	1,235	880	700	613	810	1,907	3,039	2,907
New Mexico	87,223	83,365	79,649	75,324	71,568	71,024	75,169	79,336	78,530	75,712
New York	824	852	855	824	841	834	831	840	1,071	853
North Dakota	23,273	24,812	30,914	40,337	45,424	47,271	50,690	52,652	50,857	45,628
Ohio	10,359	11,154	11,953	12,928	13,551	14,571	14,971	15,271	14,988	13,442
Oklahoma	156,382	150,456	143,642	150,140	154,056	158,621	158,604	168,385	162,739	149,105
Pennsylvania	2,715	2,887	2,874	2,651	3,729	4,282	4,282	4,284	4,851	3,783
South Dakota	632	869	846	765	973	1,158	1,172	1,340	1,596	1,586
Tennessee	820	593	614	743	918	1,132	1,056	920	786	644
Texas	1,137,880	1,074,050	1,018,094	977,436	945,132	925,296	902,676	904,774	888,831	839,606
Utah	33,113	31,368	27,728	24,978	25,860	22,440	29,534	34,689	40,792	39,172
Virginia	2	2	4	10	13	49	65	32	26	18
Washington	-	-	-	-	-	-	-	-	-	-
West Virginia	2,518	2,382	2,406	2,336	3,473	3,227	3,628	3,524	3,555	3,134
Wyoming	136,472	137,385	131,890	126,362	130,563	118,300	118,303	124,269	128,514	121,337
Total (Mb)	3,009.3	3,178.2	3,121.3	3,146.4	3,128.6	3,156.7	3,171.0	3,249.7	3,274.6	3,168.3
Daily Avg (Mbd)	8.2	8.7	8.6	8.6	8.6	8.6	8.7	8.9	9.0	8.7

(1) Includes lease condensate.

Source: U.S. Department of Energy, Energy Information Administration, Annual Petroleum Statements & Petroleum Supply Annuals.

Section IV
Table 4d

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousands of Barrels)

STATE	1987
Alabama	20,607
Alaska	715,955
Arizona	131
Arkansas	14,230
California	364,608
Colorado	28,802
Florida	8,270
Illinois	23,980
Indiana	3,738
Kansas	59,884
Kentucky	5,743
Louisiana	476,030
Michigan	25,972
Mississippi	28,103
Missouri	110
Montana	25,059
Nebraska	6,091
Nevada	3,112
New Mexico	72,328
New York	710
North Dakota	41,351
Ohio	12,153
Oklahoma	134,378
Pennsylvania	3,302
South Dakota	1,644
Tennessee	614
Texas	785,475
Utah	35,788
Virginia	17
Washington	--
West Virginia	2,835
Wyoming	115,267
Total (Mb)	3,047.4
Daily Avg (Mbd)	8.3

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(1) Includes lease condensate.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1987.

Section IV
Table 5

U.S. STRIPPER WELL PRODUCTION BY STATE
(In Thousands of Barrels)
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	--	--	26.2	45.7	87.1	116.7	162.4	139.2	120.7	144.4
Arizona	--	3.6	1.8	0.1	3.7	5.3	5.7	6.7	4.8	4.5
Arkansas	7,719.3	7,238.9	7,281.5	6,658.6	6,747.8	5,043.7	5,198.9	6,171.5	7,753.9	7,231.2
California	51,737.9	58,245.3	5,530.8	61,451.6	77,497.2	60,574.2	52,245.7	51,409.6	49,558.2	45,520.8
Colorado	2,149.5	2,050.3	2,024.1	1,919.6	1,829.5	1,953.4	2,012.5	2,017.0	2,018.1	1,955.0
Illinois	42,860.8	38,304.3	3,128.2	28,826.6	26,023.9	25,214.7	24,936.2	23,614.2	21,159.7	20,324.9
Indiana	7,777.1	6,439.3	6,108.4	5,254.2	4,919.9	4,031.7	4,470.8	5,255.3	4,559.9	4,556.6
Kansas	55,835.4	51,857.1	0,447.9	45,948.7	44,615.0	43,706.7	44,433.0	44,189.8	44,461.1	43,947.6
Kentucky	11,301.0	10,531.0	9,128.0	7,314.0	6,463.9	6,182.8	6,172.8	5,420.8	4,712.7	4,548.8
Louisiana	8,466.8	8,077.8	7,598.8	7,324.7	7,501.8	7,574.2	8,176.0	7,739.5	7,916.1	7,680.7
Michigan	4,754.6	4,731.7	4,826.2	4,863.3	4,883.0	4,760.3	4,601.8	6,233.0	5,601.9	5,620.5
Mississippi	875.4	1,043.0	425.3	438.0	571.5	648.8	1,214.6	1,349.3	1,233.5	1,600.9
Missouri	66.3	66.1	59.3	59.8	56.0	57.0	60.3	59.5	53.3	54.3
Montana	7,454.5	1,919.3	1,910.4	2,143.9	2,024.0	3,578.7	2,947.3	3,255.3	2,804.7	2,829.5
Nebraska	1,056.1	1,191.0	1,121.7	1,196.4	1,378.8	1,545.4	1,758.0	2,012.3	2,024.8	1,865.7
New Mexico	10,201.5	10,187.3	0,074.8	10,223.8	10,835.4	11,082.5	11,141.1	11,547.2	11,830.8	12,067.9
New York	1,193.5	1,096.7	1,018.0	969.0	896.0	875.0	857.0	813.0	852.0	855.0
North Dakota	853.8	936.5	798.1	853.8	933.5	929.7	1,075.1	1,145.9	1,196.5	1,250.2
Ohio	6,904.8	5,800.2	6,550.6	6,157.4	6,361.6	6,704.6	6,996.1	7,251.2	7,808.1	8,366.8
Oklahoma	85,645.2	80,895.8	7,967.1	74,109.9	73,694.7	72,530.6	73,459.3	74,400.4	74,175.4	76,000.5
Pennsylvania	4,015.0	3,798.0	3,441.0	3,282.0	3,399.0	3,199.0	2,950.0	2,659.4	2,564.5	2,816.7
South Dakota	--	27.9	25.8	26.3	21.0	18.0	20.5	14.5	16.5	22.3
Tennessee	11.8	29.9	24.5	44.8	107.8	125.6	140.4	194.1	269.9	387.5
Texas	123,736.6	122,417.4	16,635.7	112,246.9	126,386.9	126,018.3	129,699.8	127,886.4	131,210.9	136,590.2
Utah	90.3	82.7	97.1	132.0	123.5	98.2	261.8	136.4	134.5	180.0
Virginia	0.9	0.6	0.1	0	2.8	3.0	2.7	1.7	2.4	3.7
West Virginia	3,124.0	2,969.0	2,677.0	2,407.0	2,673.0	2,478.0	2,400.0	2,384.0	2,255.2	2,381.9
Wyoming	3,455.3	3,382.3	2,996.4	1,785.1	1,897.9	5,107.0	4,790.7	5,224.7	5,333.3	5,597.0
U.S. TOTAL	441,287.2	423,322.1	41,924.9	385,683.5	411,936.0	394,162.9	392,190.5	392,531.9	391,633.1	394,405.1

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section IV
Table 5a

U.S. STRIPPER WELL PRODUCTION BY STATE
(In Thousands of Barrels)
(As of January 1)

State	1981	1982	1983	1984	1985	1986	1987	1988
Alabama	124.8	121.9	157.7	172.5	171.8	189.0	190.8	193.3
Arizona	15.8	22.6	23.9	25.6	29.0	28.1	25.5	30.1
Arkansas	5,689.5	5,465.0	5,131.9	7,117.9	5,653.3	5,285.8	5,113.5	4,888.2
California	44,109.7	54,803.8	55,419.4	55,993.3	57,124.5	41,573.4	37,181.7	37,795.8
Colorado	1,989.2	2,158.7	2,203.7	3,629.8	3,329.6	2,682.3	6,216.4	7,323.4
Illinois	20,166.5	22,238.4	23,989.1	25,889.5	25,983.9	27,718.6	24,157.2	21,682.2
Indiana	4,019.4	4,781.2	4,567.9	4,336.4	4,401.2	4,103.9	3,827.3*	3,657.2*
Kansas	44,454.1	45,010.4	47,629.1	48,267.4	48,664.8	50,861.4	61,434.9	57,802.8
Kentucky	4,572.5	4,479.2	5,143.6	5,521.9	6,630.2	6,696.0	5,514.3	4,881.7
Louisiana	7,657.3	9,011.5	9,172.0	9,000.0	9,844.0	9,000.0	10,059.3	8,809.5
Michigan	4,717.0	2,448.5	2,820.1	3,144.9	3,228.1	3,272.2	2,781.7*	2,674.0
Mississippi	1,890.4	3,804.7	2,236.5	1,286.2	1,330.2	1,721.3	1,121.0	1,270.0
Missouri	127.4	226.2	52.5	270.8	270.9	250.0	182.3	100.9
Montana	2,710.1	2,748.0	2,881.0	3,103.8	2,577.1	2,936.6	2,709.2	2,650.9
Nebraska	2,236.5	2,510.3	2,878.6	3,418.0	2,974.4	2,947.3	2,617.2	2,687.7
New Mexico	12,924.4	13,462.8	14,207.2	14,722.3	15,016.0	15,366.5	14,747.5	14,377.8
New York	824.0	849.0	719.0	774.3	679.9	600.6	488.9	511.3
North Dakota	1,225.1	1,386.1	1,492.5	1,537.3	1,755.7	1,905.2	1,692.8	1,833.3
Ohio	9,049.5	9,485.9	10,199.4	10,479.8	10,689.8	10,491.3	9,766.6	8,828.8
Oklahoma	79,945.0	83,248.7	94,237.0	94,430.5	94,045.6	91,841.8	95,902.8	109,081.6
Pennsylvania	2,650.5	3,606.0	3,717.9	3,950.5	4,241.7	4,257.4	3,356.1	2,870.1
South Dakota	24.7	39.3	55.4	43.9	82.1	65.3	34.5	57.4
Tennessee	293.4	290.5	N.A	583.7	510.3	450.8	474.6	444.8
Texas	141,825.2	145,939.8	143,928.7	153,688.5	152,719.8	158,738.5	147,986.4	141,704.3
Utah	220.3	376.7	N.A	542.7	1,088.8	1,550.3	877.8	935.4
Virginia	9.5	13.2	49.4	21.6	27.2	20.7	14.1	15.9
West Virginia	2,312.6	2,607.1	2,683.0	3,116.5	3,270.0	3,346.0	2,988.0	2,765.2
Wyoming	5,210.5	5,366.9	6,354.5	6,944.0	7,118.8	7,983.4	7,984.0	6,963.2
U.S. TOTAL	401,095.2	426,502.4	441,951.0	462,013.5	463,458.7	455,883.8	449,446.5	446,836.8

* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section IV
Table 6

OIL VOLUME, VALUE, AND REVENUES RECEIVED FROM ONSHORE FEDERAL AND INDIAN LANDS

	Federal			Indian		
Year	Volume (000 bbl)	Market Value (000 $)	Oil Revenues Received (000 $)	Volume (000 bbl)	Market Value (000 $)	Oil Revenues Received (000 $)
1920-1979	6,241,172.2	$20,856,847.5	$2,676,189.2	1,086,687.0	$3,719,762.2	$510,842.2
1980	149,699.3	3,275,608.5	413,403.2	21,991.8	449,435.0	67,185.9
1981	155,573.7	4,891,778.8	604,783.0	21,944.9	705,243.0	103,919.4
1982	149,612.8	4,273,036.0	524,530.2	19,809.9	611,292.2	92,559.8
1983	151,456.8	4,118,421.3	523,898.7	20,083.2	593,094.9	89,727.6
1984	152,339.4	4,086,190.8	519,046.6	21,801.3	584,887.1	75,973.0

Source: U.S. Department of Interior, MMS--MINERAL REVENUES: The 1984 Report on Receipts from Federal and Indian Leases.

Section IV
Table 7

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1960		1970		1980	
Company	Production	Company	Production	Company	Production
Texaco	477.6	Standard of New Jersey	946.0	Exxon	787.0
Standard of New Jersey	439.0	Texaco	808.0	Standard of Ohio	715.8
Gulf	386.2	Gulf	626.0	Atlantic Richfield	555.7
Shell	354.9	Shell	595.0	Shell	511.0
Standard of California	297.8	Standard of California	474.4	Standard of Indiana	464.0
Standard of Indiana	286.0	Standard of Indiana	466.0	Texaco	413.0
Phillips	222.5	Atlantic Richfield	405.7	Gulf	364.2
Socony-Mobil	204.1	Mobil	385.0	Standard of California	335.0
Continental	171.0	Getty	317.0	Mobil	318.0
Sinclair	139.0	Union	314.0	Getty	271.0
Cities Service	125.2	Phillips	270.2	Phillips	269.7
Sun	114.1	Sun	258.8	Sun	206.1
Ohio Oil (Marathon)	104.8	Cities Service	202.7	Union	173.4
Union	102.9	Continental	188.0	Marathon	168.3
Atlantic Refining	97.7	Marathon	174.9	Cities Service	154.7
Tidewater	89.7	City of Long Beach(1)	163.5	Conoco	148.0
Amerada	80.9	Amerada Hess	95.7	Amerada Hess	88.3
Superior	79.7	Tenneco	87.0	Tenneco	79.2
Sunray Mid-Continent	71.2	Superior	65.2	City of Long Beach(1)	72.6
Skelly	69.0	Louisiana Land & Exploration	62.0	El Paso	72.3

(1) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with Arco, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1983		1984		1985	
Company	Production	Company	Production	Company	Production
Exxon	781.0	Exxon	778.0	Exxon	768.0
Atlantic Richfield	652.8	Texaco(2)	673.8	Standard Oil (Ohio)	719.7
Standard of Ohio	612.0	Atlantic Richfield	654.7	Atlantic Richfield	647.7
Shell	524.0	Chevron (Standard of California)(3)	646.1	Texaco	640.0
Standard of Indiana	403.0	Standard of Ohio	634.4	Chevron	587.1
Texaco	346.0	Shell	534.0	Shell	530.0
Gulf	319.1	Standard of Indiana	409.0	Amoco (Std. of Ind.)	401.1
Standard of California	317.6	Mobil(4)	365.6	Mobil	352.0
Mobil	304.0	Phillips(5)	347.9	Phillips	346.0
Phillips	288.0	Sun	194.1	Sun	195.1
Getty	283.8	U.S. Steel(6)	174.1	Unocal	170.9
Sun	204.6	Unocal	168.8	U.S. Steel	160.2
Unocal (Union)	170.4	Occidental	150.0	Occidental	147.6
U.S. Steel	157.3	DuPont	120.0	DuPont	120.0
Occidental	148.0	Tenneco	98.6	Tenneco	101.4
DuPont	116.0	City of Long Beach(1)	78.6	City of Long Beach(1)	81.7
Tenneco	90.4	Amerada Hess	72.7	Amerada Hess	72.0
Amerada Hess	74.1	Union Pacific	68.8	Union Pacific	67.9
City of Long Beach(1)	72.1	El Paso	53.8	El Paso	64.7
Union Pacific	63.0	Mitchell	50.0	Santa Fe	49.9
U.S. TOTAL	10,299.0	U.S. TOTAL	10,554.0	U.S. TOTAL	10,636.0

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(1) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with Arco, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

(2) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figure includes 100% of Getty's estimated annualized production.

(3) Standard Oil of California acquired the Gulf Corporation on June 15, 1984, and on July 1, 1984 Standard changed its name to Chevron. Chevron's figure includes Gulf's 1984 full-year production.

(4) Mobil acquired Superior on September 28, 1984. Mobil's figure includes 100% of Superior's estimated annualized production.

(5) Phillips acquired Aminoil from R.J. Reynolds on October 26, 1984. Phillips' figure includes 100% of Aminoil's estimated annualized production.

(6) U.S. Steel acquired the U.S. assets of Husky Oil Ltd. on May 31, 1984. U.S. Steel's figure includes 100% of Husky's estimated annualized production of its U.S. assets.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1985, Discussion Paper #014R.

Section IV
Table 7b

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1986	
Company	Production
Exxon	761.0
Standard Oil	726.6
ARCO (Atlantic Richfield)	659.1
Texaco	590.0
Shell	571.0
Chevron	546.2
Amoco	304.0
Mobil	342.0
Phillips	316.0
USX (U.S. Steel)(1)	189.0
Sun	171.3
Unocal	167.9
Occidental	148.0
DuPont	126.0
Tenneco	104.1
City of Long Beach(2)	76.9
Union Pacific	71.2
Burlington Northern(3)	71.0
Amerada Hess	68.8
Enron	50.9
U.S. TOTAL	10,289.0

(1) On February 11, 1986 a subsidiary of U.S. Steel merged with Texas Oil and Gas (TXO). On July 8, 1986, in recognition of its major diversification into oil and gas businesses, U.S. Steel changed its name to USX Corporation.

(2) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with ARCO, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

(3) On December 13, 1985 Southland Royalty became a wholly owned subsidiary of Burlington Northern Inc. (BNI). BNI also is the parent company of El Paso Natural Gas.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1986, Discussion Paper #014R, October 1987.

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	--	--	--	--	--	--	--	--	--	--	--	--	--	55.3
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	170.8	138.9
Arizona	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	23.6	23.8	22.4	23.2	21.8	20.8	20.0	18.6	17.2	16.3	15.6	13.8	12.2	13.1
California	38.3	36.5	35.9	34.2	33.7	32.5	31.8	30.1	28.8	27.1	25.5	23.4	23.1	22.3
Colorado	84.4	75.1	89.1	84.0	94.7	90.2	89.8	85.2	78.2	78.2	69.5	61.0	59.4	63.1
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	7.1	6.8	6.6	6.2	6.0	5.7	6.1	6.1	7.5	7.4	6.7	6.9	6.6	6.6
Indiana	7.6	7.5	9.3	9.2	8.7	8.8	8.9	7.5	7.3	7.4	7.8	6.8	6.4	6.4
Kansas	10.7	10.9	9.7	9.7	9.9	9.5	9.1	8.9	9.0	9.2	8.9	8.6	8.4	7.7
Kentucky	1.7	1.6	1.6	1.8	2.0	1.9	1.9	2.3	2.5	2.6	2.8	2.6	3.7	2.8
Louisiana	52.4	53.7	50.6	50.3	52.3	51.7	51.1	44.7	42.7	41.2	42.2	38.1	42.7	45.5
Michigan	12.6	13.0	12.3	11.2	9.8	9.3	8.4	8.1	7.5	7.1	6.8	6.4	7.1	10.3
Mississippi	100.2	102.5	74.3	68.2	59.2	54.7	51.1	45.5	45.8	47.3	45.5	47.5	58.5	51.5
Missouri	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Montana	8.5	8.6	8.0	6.9	7.3	7.6	9.4	11.4	12.6	17.0	20.2	19.9	21.0	21.8
Nebraska	10.5	10.7	16.4	42.4	35.0	26.0	53.5	47.4	45.8	54.8	57.8	50.3	47.3	43.0
Nevada	--	--	--	--	--	--	--	--	--	--	--	--	--	--
New Mexico	23.1	25.3	23.8	22.4	23.4	24.4	27.4	27.2	27.7	26.6	25.7	23.6	23.4	21.7
New York	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.2	0.3	0.3
North Dakota	--	--	--	--	--	99.6	83.5	46.0	59.3	54.2	42.5	39.9	38.5	42.3
Ohio	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.0	0.9
Oklahoma	7.4	8.0	7.7	8.1	9.0	8.8	9.0	7.9	8.2	8.4	8.1	7.3	7.2	6.9
Pennsylvania	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2
South Dakota	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Texas	21.1	22.4	17.5	18.3	21.0	20.4	19.7	18.0	18.4	17.9	16.1	13.6	14.1	13.3
Utah	--	--	--	--	--	--	--	--	--	--	75.7	182.7	180.1	137.6
Virginia	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Wyoming	28.7	33.7	27.5	32.9	34.6	32.6	40.0	42.5	40.4	40.5	41.1	42.4	47.2	50.3
Other	16.4	15.6	25.9	32.8	32.8	35.3	35.7	33.2	32.4	41.9	45.4	42.0	34.1	12.0
TOTAL	12.0	12.8	11.4	11.8	13.1	13.0	13.1	12.6	13.2	13.3	12.8	11.7	12.2	12.0

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(1) Includes lease condensate.

Source: U.S. Bureau of Mines, Minerals Yearbook and Annual Petroleum Statement.

Section IV
Table 8a

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
Alabama	47.6	47.2	52.8	45.5	42.6	42.2	38.1	38.7	38.5	35.8	38.4	49.3	56.6
Alaska	559.2	573.6	555.2	549.4	539.6	609.9	961.4	1,407.7	1,171.2	1,190.1	1,161.6	1,088.3	1,029.3
Arizona	--	21.4	28.7	20.6	29.5	45.2	616.2	438.5	261.4	171.5	116.8	93.6	78.7
Arkansas	12.6	12.4	12.6	12.1	11.8	10.5	9.0	8.2	7.9	7.5	7.1	7.1	6.9
California	21.6	21.9	20.7	20.2	21.2	23.0	23.7	24.7	25.0	25.0	24.5	24.0	23.6
Colorado	63.4	56.3	50.7	47.3	46.9	42.6	45.3	49.1	42.6	37.8	42.2	47.5	51.4
Florida	--	104.4	110.5	109.3	140.7	123.2	103.5	94.8	106.6	156.5	212.3	419.7	619.9
Illinois	6.6	6.9	6.8	6.4	6.0	5.9	5.7	5.6	5.1	4.5	4.2	3.8	3.4
Indiana	5.8	5.8	5.6	5.4	5.9	5.5	5.5	5.2	5.1	5.0	4.8	4.2	3.3
Kansas	7.6	7.0	6.4	6.2	6.1	6.1	5.8	5.6	5.4	5.3	5.0	4.8	4.4
Kentucky	2.5	2.5	2.9	3.6	3.4	3.3	3.0	3.0	2.9	2.7	2.2	1.8	1.6
Louisiana	47.1	51.1	52.2	52.6	54.7	60.3	68.7	73.3	77.6	86.7	93.6	89.3	81.9
Michigan	12.0	10.9	10.3	10.2	9.9	9.6	9.2	8.6	8.2	7.8	7.8	9.2	10.8
Mississippi	50.7	56.8	61.3	59.0	60.4	59.8	61.3	62.2	68.4	63.2	56.5	53.0	50.4
Missouri	--	1.4	1.4	1.7	1.7	1.8	1.4	1.3	1.3	1.2	1.4	1.2	1.2
Montana	24.0	24.7	23.1	24.0	25.2	26.5	27.8	39.1	35.9	31.6	29.7	27.7	27.0
Nebraska	38.9	37.6	34.3	30.4	28.4	24.3	24.9	25.4	24.5	24.6	22.6	20.4	17.6
Nevada	--	96.6	80.8	154.8	81.8	88.5	66.5	57.0	50.9	40.8	41.3	45.5	43.8
New Mexico	20.8	19.1	18.3	18.1	18.4	19.7	20.8	20.9	20.8	20.4	18.8	17.5	16.1
New York	0.2	0.3	0.3	0.4	0.4	0.4	1.1	0.9	0.7	0.6	0.5	0.5	0.5
North Dakota	41.4	39.7	37.9	38.0	37.4	37.2	34.0	33.1	30.6	35.0	40.6	39.3	39.5
Ohio	0.9	0.9	1.1	3.1	2.6	2.1	1.9	2.0	1.9	1.8	1.5	1.7	1.6
Oklahoma	6.7	6.9	6.8	6.8	6.9	7.6	7.8	7.5	7.6	7.7	7.6	7.6	7.1
Pennsylvania	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
South Dakota	--	24.4	27.4	28.1	23.1	14.7	20.3	18.6	16.3	16.9	21.6	19.3	26.9
Tennessee	--	1.1	1.1	0.7	0.8	0.6	0.6	0.5	2.6	18.6	15.9	7.2	7.9
Texas	13.2	13.1	13.5	13.6	13.8	23.0	15.8	16.3	17.0	19.0	19.2	20.9	21.7
Utah	114.0	103.3	108.6	93.2	82.5	77.4	75.9	73.6	74.3	73.9	73.6	82.5	95.2
Virginia	--	1.6	1.5	2.3	1.6	0.7	2.7	1.8	0.5	0.5	0.9	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.5
Wyoming	50.6	48.1	52.1	49.1	47.0	44.6	44.0	46.8	49.1	48.1	44.5	42.7	46.9
Other	13.4	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	12.1	12.3	12.7	12.9	13.3	14.2	15.3	16.2	16.9	18.0	18.1	18.4	18.3

(1) Includes lease condensate.

Source: U.S. Bureau of Mines, Minerals Yearbook and Annual Petroleum Statement

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Alabama	62.5	62.1	64.8	79.1	85.0	80.3	90.1	81.9	76.3	69.3	71.3	73.0
Alaska	989.4	947.2	897.5	1,935.6	3,805.3	3,765.9	3,853.4	2,298.8	2,231.1	2,550.3	2,691.3	1,868.3
Arizona	76.5	65.7	51.6	41.8	36.4	37.0	33.6	27.9	25.5	19.1	18.9	17.1
Arkansas	6.3	6.1	6.7	7.2	7.1	6.5	6.1	6.1	6.0	6.2	5.4	5.4
California	22.4	21.7	21.3	22.3	21.9	22.1	21.9	22.4	23.3	23.5	23.2	23.3
Colorado	49.2	45.1	40.4	36.9	32.1	26.4	23.5	28.5	26.9	17.3	14.7	15.2
Florida	703.8	822.4	849.5	903.1	1,037.7	1,143.6	993.0	814.3	570.8	389.5	286.3	210.7
Illinois	3.1	3.0	3.1	3.0	2.7	2.5	2.5	2.5	2.8	2.8	2.6	2.7
Indiana	3.1	2.8	2.6	2.9	2.5	2.4	2.5	2.3	2.5	2.3	2.2	2.0
Kansas	4.1	3.9	3.8	3.7	3.6	3.6	3.6	4.3	4.2	4.0	4.2	4.0
Kentucky	1.5	1.5	1.5	1.3	1.1	1.1	1.1	1.2	1.3	1.4	1.1	1.0
Louisiana	72.3	64.0	61.4	61.5	60.3	54.5	50.5	48.6	56.1	56.2	57.4	53.9
Michigan	12.4	17.0	22.4	23.5	24.4	24.6	21.0	20.3	19.0	17.7	17.1	14.6
Mississippi	54.0	56.9	56.6	47.0	40.0	32.9	26.3	29.7	34.3	31.6	35.0	24.2
Missouri	1.1	1.0	1.0	0.9	0.9	1.2	1.4	1.5	1.1	1.3	1.4	1.1
Montana	28.8	28.3	27.4	27.0	24.8	23.2	22.2	21.3	19.7	17.1	19.4	19.4
Nebraska	16.2	14.5	13.6	12.2	11.3	11.0	10.5	9.8	9.4	8.3	8.4	9.1
Nevada	47.1	42.0	43.4	120.7	186.3	188.0	120.2	NA	NA	NA	140.8	185.0
New Mexico	17.8	19.3	18.2	16.9	14.4	11.2	11.2	12.0	11.8	11.8	11.9	11.5
New York	0.5	0.5	0.5	0.5	0.9	0.5	0.4	0.4	0.4	0.4	0.5	0.6
North Dakota	37.3	32.2	33.3	40.2	34.7	34.4	39.6	48.4	45.6	37.2	42.3	37.7
Ohio	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5
Oklahoma	6.7	6.2	6.1	5.9	5.5	5.2	5.2	5.1	4.7	4.5	4.6	4.3
Pennsylvania	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6
South Dakota	46.7	37.5	30.2	30.9	30.9	25.8	21.9	22.2	24.4	22.9	26.5	26.5
Tennessee	19.1	11.5	8.4	9.0	5.5	5.1	5.2	5.1	4.8	4.2	3.2	2.7
Texas	21.7	20.9	20.2	19.2	17.8	16.6	10.5	14.3	13.5	12.6	12.1	11.6
Utah	104.4	96.6	74.7	68.6	62.8	53.3	41.7	45.9	38.8	49.5	52.7	57.5
Virginia	5.5	1.6	1.2	1.0	1.2	1.8	3.6	NA	NA	NA	NA	NA
Washington	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.6
Wyoming	47.1	41.1	39.6	37.1	35.3	33.9	29.0	30.9	27.5	28.6	29.4	29.2
Other	--	--	--	--	--	--	--	--	36.3	43.6	2.8	2.5
TOTAL	17.6	16.8	16.3	16.4	17.0	16.3	15.9	15.4	14.9	14.4	14.3	13.9

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(1) Includes lease condensate.

Source: 1974-1980: U.S. Department of Energy, Energy Information Administration, Annual Petroleum Statements.
1981-1985: Calculated by API based on crude oil production from U.S. Department of Energy, Energy Information Administration divided by the number of producing wells from World Oil Magazine.

Section IV
Table 8c

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1986
Alabama	68.6
Alaska	1,683.1
Arizona	70.3
Arkansas	4.3
California	25.5
Colorado	14.6
Florida	225.5
Illinois	2.3
Indiana	1.7
Kansas	3.8
Kentucky	0.8
Louisiana	57.0
Michigan	14.4
Mississippi	36.8
Missouri	0.7
Montana	18.9
Nebraska	10.6
Nevada	274.6
New Mexico	11.3
New York	0.5
North Dakota	35.3
Ohio	1.2
Oklahoma	4.1
Pennsylvania	0.5
South Dakota	29.4
Tennessee	2.2
Texas	11.4
Utah	57.8
Virginia	1.5
Washington	--
West Virginia	0.5
Wyoming	28.0
TOTAL	13.9

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(1) Includes lease condensate.

Source: Calculated by API based on crude oil production from the Department of Energy and number of producing wells for World Oil Magazine.

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1857	0	0	0	2	0	0	0	2
1858	0	0	0	4	0	0	0	4
1859	2	0	0	5	0	0	0	7
1860	500	0	0	8	0	0	0	508
1861	2,114	0	0	17	0	0	0	2,131
1862	3,057	12	0	23	0	0	0	3,092
1863	2,611	83	0	69	0	0	0	2,763
1864	2,116	90	0	98	0	0	0	2,304
1865	2,498	110	0	108	0	0	0	2,716
1866	3,598	175	0	126	0	0	0	3,899
1867	3,347	190	0	172	0	0	0	3,709
1868	3,646	200	0	144	0	0	0	3,990
1869	4,215	220	0	261	0	0	0	4,696
1870	5,261	250	0	288	0	0	0	5,799
1871	5,205	270	0	255	0	0	0	5,730
1872	6,293	308	0	276	0	0	0	6,877
1873	9,894	365	0	579	0	0	0	10,838
1874	10,927	169	0	837	0	0	0	11,933
1875	11,963	220	0	964	0	0	5	13,152
1876	9,133	312	0	1,599	0	0	7	11,051
1877	13,350	312	0	2,082	0	0	10	15,754
1878	15,397	312	0	2,690	0	0	18	18,417
1879	19,914	575	0	3,089	0	0	23	23,601
1880	26,286	350	0	3,356	0	0	26	30,018
1881	27,661	275	0	4,040	0	0	17	31,993
1882	30,511	275	0	5,064	0	0	15	35,865
1883	23,450	250	0	6,535	0	0	20	30,255
1884	24,218	250	0	11,473	0	0	28	35,969
1885	21,859	250	0	14,626	0	0	30	35,765
1886	28,065	584	0	18,556	0	0	38	47,243
1887	28,283	526	0	18,969	0	0	29	47,807
1888	27,612	695	0	23,821	0	0	37	52,165
1889	35,164	705	0	25,491	0	0	147	61,507
1890	45,824	795	0	29,844	0	0	170	76,633
1891	54,293	755	0	35,809	0	0	243	81,100
1892	50,515	780	0	37,133	0	0	311	88,739
1893	48,431	798	0	41,804	0	0	1,055	92,038
1894	49,344	829	0	37,976	0	0	1,188	89,337

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(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

Section IV
Table 9a

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1895	52,892	726	0	48,316	0	0	1,758	103,692
1896	60,960	727	47	50,371	0	0	2,094	114,199
1897	60,476	710	71	57,376	0	0	3,360	121,993
1898	55,364	758	71	64,961	0	0	3,825	124,979
1899	57,071	808	89	69,903	0	0	3,276	131,147
1900	63,621	913	274	80,126	0	0	4,203	149,137
1901	69,389	757	285	90,427	0	0	6,562	167,440
1902	88,767	531	327	87,115	0	0	5,043	181,809
1903	100,461	487	353	84,053	0	0	9,489	194,879
1904	117,081	553	416	88,746	0	0	11,112	217,948
1905	134,717	634	624	65,752	0	0	13,334	215,091
1906	126,494	569	1,033	71,376	0	0	13,761	213,263
1907	166,095	789	1,806	79,242	0	0	16,045	263,957
1908	178,527	528	4,690	84,111	0	0	17,201	285,287
1909	183,171	421	4,200	91,291	0	0	19,606	298,709
1910	209,557	316	5,055	93,817	0	0	18,998	327,763
1911	220,449	291	14,316	88,903	0	21	20,361	344,361
1912	222,935	243	18,794	90,615	0	214	19,622	352,443
1913	248,446	228	28,402	85,111	1,857	98	21,183	385,345
1914	265,763	215	29,992	87,104	2,910	754	21,786	407,544
1915	281,104	215	36,753	86,677	3,616	216	23,442	432,033
1916	300,767	195	44,935	82,056	4,477	412	24,630	457,500
1917	335,316	214	60,867	73,704	7,147	952	24,662	502,515
1918	355,928	305	70,183	42,598	8,623	1,942	23,911	503,515
1919	378,367	241	93,358	45,150	10,139	1,522	27,078	555,875
1920	442,929	196	164,137	39,181	12,230	1,046	29,145	688,884
1921	472,183	188	203,047	43,297	16,673	1,258	29,336	766,002
1922	557,531	179	195,487	51,736	22,247	1,197	30,499	858,898
1923	732,407	170	166,448	56,734	25,230	1,063	34,020	1,015,736
1924	713,940	161	166,340	65,481	32,373	1,133	34,866	1,014,318
1925	763,743	332	156,324	76,367	34,038	1,238	35,868	1,067,933
1926	770,874	364	157,594	94,974	35,842	1,197	35,981	1,096,823
1927	901,129	477	166,943	110,496	40,026	1,275	42,223	1,262,582
1928	901,474	624	205,641	122,970	44,174	1,850	48,026	1,324,774
1929	1,007,323	1,117	235,455	141,764	42,943	1,888	55,339	1,485,867
1930	898,011	1,522	229,024	176,984	46,742	2,012	57,569	1,411,904
1931	851,081	1,543	201,218	222,372	45,276	2,045	50,074	1,373,656
1932	785,159	1,044	200,555	218,032	50,308	1,901	53,244	1,310,298
1933	905,656	1,145	203,143	216,679	55,340	1,670	57,364	1,441,000
1934	908,065	1,411	234,673	247,248	65,825	1,552	62,696	1,521,474

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(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1935	996,596	1,447	251,071	254,392	85,946	1,305	64,190	1,654,951
1936	1,099,687	1,500	262,975	261,058	97,789	1,282	67,245	1,791,540
1937	1,279,160	2,944	305,367	257,836	117,467	1,218	75,235	2,039,231
1938	1,214,355	6,966	301,464	267,064	119,808	1,608	76,772	1,988,041
1939	1,264,962	7,838	327,256	278,897	120,465	4,693	82,045	2,086,160
1940	1,353,214	8,591	312,942	284,094	102,691	6,532	81,743	2,149,821
1941	1,402,228	10,134	351,438	300,443	74,531	8,573	73,310	2,220,657
1942	1,386,645	10,365	255,151	295,536	102,753	8,316	34,334	2,093,100
1943	1,505,613	10,152	292,614	269,723	110,900	8,992	58,743	2,256,637
1944	1,677,904	10,099	381,747	331,649	147,496	9,452	33,942	2,592,289
1945	1,713,655	8,483	450,146	203,888	194,258	9,434	14,833	2,594,697
1946	1,733,939	7,586	516,167	214,046	256,369	9,091	8,232	2,745,430

(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

Section IV
Table 10

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868
Pennsylvania	2	500	2,114	3,057	2,611	2,116	2,498(1)	3,598(1)	3,347(1)	3,646(1)
U.S. TOTAL	2	500	2,114	3,057	2,611	2,116	2,498	3,598	3,347	3,646

State	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878
California	NA	NA	NA	NA	NA	NA	175(2)	12	13	15
Ohio	NA	NA	NA	NA	NA	NA	200(2)	32	30	38
Pennsylvania	4,215(1)	5,261(1)	5,205(1)	6,293(1)	9,894(1)	10,927(1)	8,969(1)	8,969(1)	13,135(1)	15,164(1)
West Virginia	NA	NA	NA	NA	NA	NA	2,800(2)	172	172	180
U.S. TOTAL	4,215	5,261	5,205	6,293	9,894	10,927	11,963(2)	9,133	13,350	15,397

State	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888
California	20	40	100	129	143	262	325	377	678	690
Colorado	0	0	0	0	0	0	0	0	76	298
Kentucky	NA	NA	NA	161(2,3)	5(3)	4(3)	5(3)	5(3)	5(3)	5(3)
Ohio	20	39	34	40	47	90	662	1,783	5,023	10,011
Pennsylvania	19,685(1)	26,028(1)	26,376(1)	23,368	19,125	20,541	18,118	23,647	20,281	16,489(1)
West Virginia	180	179	151	128	126	90	91	102	145	119
U.S. TOTAL	19,914	26,286	27,661	30,511(4)	23,450	24,218	21,859	28,065	28,283	27,612

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(1) Includes New York.
(2) 1875 total U.S. production includes cumulative California production, 1861-1875; cumulative Ohio and West Virginia production, 1860-1875.
(3) Includes Tennessee.
(4) 1882 total U.S. production includes cumulative Kentucky production, 1860-1882.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
California	303	307	324	385	470	706	1,209	1,253	1,903	2,257
Colorado	317	369	666	824	594	516	438	361	385	444
Illinois	1	1	1	1	1	(1)	(1)	(1)	1	(1)
Indiana	33	64	137	698	2,335	3,689	4,386	4,681	4,122	3,731
Kansas	1	1	2	5	18	40	44	114	81	72
Kentucky	5(2)	6(2)	9(2)	7(2)	3(2)	2(2)	2(2)	2(2)	(1)	6(2)
Ohio	12,472	16,125	17,740	16,363	16,249	16,792	19,545	23,941	21,561	18,739
Oklahoma	0	0	(1)	(1)	(1)	(1)	(1)	(1)	1	0
Pennsylvania	19,591	28,458(3)	31,424	27,149	19,283	18,078	18,231	19,379	17,983	14,743
Texas	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	66	546
West Virginia	544	493	2,406	3,810	8,446	8,577	8,120	10,020	13,090	13,615
Wyoming	0	0	0	0	0	2	4	3	4	6
U.S. TOTAL	35,164	45,824	54,293	50,515	48,431	49,344	52,892	60,960	60,476	55,634

(1) Less than 500 barrels.
(2) Includes Tennessee.
(3) Includes New York.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
California	2,642	4,325	8,787	13,984	24,382	29,649	33,428	33,099	39,748	44,855
Colorado	390	317	461	397	484	501	376	328	332	380
Illinois	(1)	--	(1)	(1)	--	--	181	4,397	24,282	33,686
Indiana	3,848	4,874	5,757	7,481	9,186	11,339	10,964	7,674	3,283	3,283
Kansas	70	75	179	332	932	4,251	12,014(2)	21,718(2)	2,410	1,801
Kentucky	18(3)	62(3)	137(3)	185	554(3)	998(3)	1,217(3)	1,214(3)	821(3)	728
Louisiana	--	--	--	549	918	2,959	8,910	9,077	5,000	5,789
Michigan	--	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Missouri	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Ohio	21,142	22,363	21,648	21,014	20,480	18,877	16,347	14,788	12,207	10,859
Oklahoma	--	6	10	37	139	1,367	(5)	(5)	43,524	45,799
Pennsylvania	13,054	13,258	12,625	12,064	11,355	11,126	10,437	10,257	10,000	9,424
Texas	669	836	4,394	18,084	17,956	22,241	28,136	12,568	12,323	11,207
Utah	--	--	--	--	--	--	--	--	(4)	(4)
West Virginia	13,911	16,196	14,177	13,513	12,900	12,645	11,578	10,121	9,095	9,523
Wyoming	6	6	5	6	9	12	8	7	9	18
Other States	--	2	2	1	9	3	3	3	4	15
U.S. TOTAL	57,071	63,621	69,389	88,767	100,461	117,081	134,717	126,494	166,095	178,527

(1) Less than 500 barrels.
(2) Includes Oklahoma.
(3) Includes Tennessee.
(4) Included in Other States.
(5) Included in Kansas.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
California	55,472	73,011	81,134	87,269	97,788	99,775	86,592	90,952	93,878	97,532
Colorado	311	240	227	206	189	223	208	197	121	143
Illinois	30,898	33,143	31,317	28,602	23,894	21,920	19,042	17,714	15,777	13,366
Indiana	2,296	2,160	1,695	970	956	1,336	876	769	760	878
Kansas	1,264	1,128	1,279	1,593	2,375	3,104	2,823	8,738	36,536	45,451
Kentucky	639	469	472	484	525	503	437	1,202	3,088	4,368
Louisiana	3,060	6,841	10,721	9,263	12,499	14,309	18,192	15,248	11,392	16,043
Michigan	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Missouri	(1)	(1)	(1)	--	(1)	(1)	(1)	(1)	--	--
Montana	--	--	--	--	--	--	--	45	100	69
Ohio	10,633	9,916	8,817	8,969	8,781	8,536	7,825	7,744	7,751	7,285
Oklahoma	47,859	52,029	56,069	51,427	63,579	73,632	97,915	107,072	107,508	103,347
Pennsylvania	9,299	8,795	8,248	7,838	7,917	8,170	7,838	7,593	7,733	7,408
Tennessee	--	--	--	--	--	--	--	1	12	8
Texas	9,534	8,899	9,526	11,735	15,010	20,068	24,943	27,645	32,413	38,750
Utah	(1)	(1)	(1)	--	--	--	--	--	--	--
West Virginia	10,745	11,753	9,796	12,129	11,567	9,680	9,265	8,731	8,379	7,867
Wyoming	20	115	187	1,572	2,407	3,560	4,246	6,234	8,978	12,596
Other States	6	4	8	4	11	8	14	8	10	8
U.S. TOTAL	183,171	209,557	220,449	222,935	248,446	265,763	281,104	300,767	335,316	355,928

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section IV
Table 10d

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Arkansas	--	(1)	10,473	12,712	36,610	46,028	77,398	58,332	40,005	32,096
California	101,183	103,377	112,600	138,468	262,876	228,933	232,492	224,673	231,196	231,811
Colorado	121	111	108	97	86	445	1,226	2,768	2,831	2,774
Illinois	11,960	10,774	10,043	9,383	8,707	8,081	7,863	7,760	6,994	6,462
Indiana	972	945	1,158	1,087	1,043	935	829	808	852	1,052
Kansas	33,048	39,005	36,456	31,766	28,250	28,836	38,357	41,498	41,069	38,596
Kentucky	9,278	8,738	9,013	8,973	8,069	7,407	6,759	6,274	6,719	7,359
Louisiana	17,188	35,714	27,103	35,376	24,919	21,124	20,272	23,201	22,818	21,847
Michigan	(1)	--	--	--	--	--	4	94	439	594
Missouri	(1)	(1)	(1)	(1)	(1)	--	--	--	--	--
Montana	90	340	1,509	2,449	2,782	2,815	4,091	7,727	5,058	4,015
Ohio	7,736	7,400	7,335	6,781	7,085	6,811	7,212	7,272	7,593	7,015
Oklahoma	86,911	106,206	114,634	149,571	160,929	173,538	176,768	179,195	277,775	249,857
Pennsylvania	8,137	7,438	7,418	7,425	7,609	7,486	8,097	8,961	9,526	9,956
Tennessee	15	14	12	10	8	10	24	43	60	46
Texas	79,366	96,868	106,166	118,684	131,023	134,522	144,648	166,916	217,389	257,320
Utah	--	(1)	--	--	00	(1)	(1)	(1)	(1)	(1)
West Virginia	8,327	8,249	7,822	7,021	6,358	5,920	5,763	5,946	6,023	5,661
Wyoming	13,172	16,831	19,333	26,715	44,785	39,498	29,173	25,776	21,307	21,461
Other States	12	13	12	13	18	13	12	8	7	6
U.S. TOTAL	378,367	442,929	472,183	557,531	732,407	713,940	763,743	770,874	901,129	901,474

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section IV
Table 10e

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Arkansas	24,917	19,702	14,791	12,051	11,686	11,182	11,008	10,469	11,764	18,180
California	292,534	227,329	188,830	178,128	172,010	174,305	207,832	214,773	238,521	249,749
Colorado	2,358	1,656	1,545	1,136	919	1,139	1,560	1,650	1,605	1,412
Illinois	6,319	5,736	5,039	4,673	4,244	4,479	4,322	4,475	7,499	24,075
Indiana	981	994	840	806	737	838	777	822	844	995
Kansas	42,813	41,638	37,018	34,848	41,976	46,482	54,843	58,317	70,761	60,064
Kentucky	7,775	7,389	6,456	6,287	4,608	4,860	5,258	5,633	5,484	5,821
Louisiana	20,554	23,272	21,804	21,807	25,168	32,869	50,330	80,491	90,924	95,208
Michigan	4,528	3,911	3,789	6,910	7,942	10,603	15,776	11,928	16,628	18,745
Missouri	--	--	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Montana	3,980	3,349	2,830	2,457	2,273	3,603	4,603	5,868	5,805	4,946
Ohio	6,743	6,486	5,327	4,644	4,235	4,234	4,082	3,847	3,559	3,298
Oklahoma	225,004	216,486	180,574	153,244	182,251	180,107	185,288	206,555	228,839	174,994
Pennsylvania	11,820	12,803	11,892	12,412	12,624	14,478	15,810	17,070	19,189	17,426
Tennessee	19	21	6	5	5	10	15	(1)	(1)	(1)
Texas	296,876	290,457	332,437	312,478	402,609	381,516	392,666	427,411	510,318	475,850
Utah	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	11	12
West Virginia	5,574	5,071	4,472	3,876	3,815	4,095	3,902	3,847	3,845	3,684
Wyoming	19,314	17,868	14,834	13,418	11,227	12,556	13,755	14,582	19,166	19,022
Other States	7	7	7	16	30	41	50	63	66	70
U.S. TOTAL	1,007,323	898,011	851,081	785,159	905,656	908,065	996,596	1,099,687	1,279,160	1,214,355

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1939	1940	1941	1942	1943	1944	1945	1946
Alabama	--	--	--	--	--	43	181	380
Arkansas	21,238	25,775	26,327	26,628	27,600	29,418	28,613	28,375
California	224,354	223,881	230,263	248,326	284,188	311,793	326,482	314,713
Colorado	1,404	1,626	2,150	2,199	2,320	3,083	5,036	11,856
Florida	--	--	--	--	4	12	30	57
Illinois	94,912	147,647	132,393	106,391	82,260	77,413	75,094	75,297
Indiana	1,711	4,978	7,411	6,743	5,283	5,118	4,868	6,726
Kansas	60,703	66,139	83,242	97,636	106,178	98,762	96,415	97,218
Kentucky	5,621	5,188	4,762	4,534	7,883	9,621	10,325	10,578
Louisiana	93,646	103,584	115,908	115,785	123,592	129,645	131,051	143,669
Michigan	23,462	19,753	16,359	21,754	20,768	18,490	17,267	17,074
Mississippi	107	4,400	15,327	28,833	18,807	16,337	19,062	24,298
Missouri	40	44	47	36	36	45	45	51
Montana	5,960	6,728	7,526	8,074	7,916	8,647	8,420	8,825
Nebraska	2	276	1,898	1,237	635	417	305	293
Ohio	3,156	3,159	3,510	3,543	3,322	2,937	2,828	2,908
Oklahoma	159,913	156,164	154,702	140,690	123,152	124,616	139,299	134,794
Pennsylvania	17,382	17,353	16,750	17,779	15,757	14,118	12,515	12,996
Tennessee	50	24	12	9	10	9	8	10
Texas	483,528	493,209	505,572	483,097	594,343	746,699	754,710	760,215
Utah	4	3	4	--	--	--	--	--
Virginia	--	--	--	--	2	3	4	23
West Virginia	3,580	3,444	3,433	3,574	3,349	3,070	2,879	2,929
Wyoming	21,454	25,711	29,878	32,812	34,253	33,356	36,219	38,977
U.S. TOTAL	1,264,962	1,353,214	1,402,208	1,386,645	1,505,613	1,677,904	1,713,655	1,733,939

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

SECTION V. FINANCIAL

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Table 20. Domestic Outlays for Petroleum Exploration for 30 Large Energy Companies

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Table 22. Worldwide Outlays for Petroleum Property Acquistions and Exploration and Development Activities for 30 Large Energy Companies

Table 23. Domestic Oil and Gas Finding Costs for 30 Large Energy Companies

Table 24. Worldwide Oil and Gas Finding Costs for 30 Large Energy Companies

Section V
Table 1

AVERAGE HOURLY EARNINGS-TOTAL MINING AND MANUFACTURING VS. PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING
(Annual Average)

		Petroleum and Natural Gas Extraction				
Year	Total Mining	Total	Crude Petroleum and Natural Gas Fields	Field Service Workers	Total Manufacturing	Petroleum Refining
1947	$1.47	N.A.	$1.40	N.A.	$1.22	$1.57
1948	1.66	N.A.	1.58	N.A.	1.33	1.79
1949	1.72	N.A.	1.69	N.A.	1.38	1.88
1950	1.77	N.A.	1.72	N.A.	1.44	1.94
1951	1.93	N.A.	1.85	N.A.	1.56	2.09
1952	2.01	N.A.	1.98	N.A.	1.65	2.20
1953	2.14	N.A.	2.10	N.A.	1.74	2.33
1954	2.14	N.A.	2.15	N.A.	1.78	2.38
1955	2.20	N.A.	2.20	N.A.	1.86	2.47
1956	2.33	N.A.	2.35	N.A.	1.95	2.66
1957	2.46	N.A.	2.47	N.A.	2.05	2.77
1958	2.47	$2.39	2.54	$2.24	2.11	2.84
1959	2.56	2.43	2.65	2.25	2.19	2.99
1960	2.61	2.46	2.69	2.26	2.26	3.02
1961	2.64	2.53	2.80	2.30	2.32	3.16
1962	2.70	2.60	2.83	2.41	2.39	3.19
1963	2.75	2.66	2.92	2.43	2.46	3.32
1964	2.81	2.65	2.95	2.43	2.53	3.37
1965	2.92	2.74	3.03	2.53	2.61	3.47
1966	3.05	2.87	3.13	2.70	2.72	3.60
1967	3.19	3.03	3.25	2.88	2.83	3.77
1968	3.35	3.22	3.39	3.11	3.01	3.94
1969	3.61	3.43	3.60	3.33	3.19	4.23
1970	3.85	3.57	3.83	3.40	3.36	4.49
1971	4.06	3.75	4.15	3.48	3.57	4.82
1972	4.41	4.00	4.49	3.67	3.81	5.25
1973	4.73	4.29	4.79	3.99	4.08	5.54
1974	5.21	4.82	5.33	4.56	4.41	5.96
1975	5.90	5.34	6.05	5.00	4.81	6.90
1976	6.42	5.76	6.59	5.40	5.19	7.75
1977	6.88	6.23	7.13	5.87	5.63	8.44
1978	7.67	7.01	8.05	6.60	6.17	9.32
1979	8.48	7.73	8.80	7.34	6.69	10.08
1980	9.18	8.55	9.71	8.19	7.27	10.94
1981	10.06	9.49	10.81	9.11	7.98	12.17
1982	10.82	10.32	11.94	9.78	8.50	13.30
1983	11.30	10.69	12.38	9.97	8.84	14.33
1984	11.58	10.66	12.78	9.89	9.17	14.57

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

AVERAGE HOURLY EARNINGS-TOTAL MINING AND MANUFACTURING VS. PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING

(Annual Average)

		Petroleum and Natural Gas Extraction				
Year	Total Mining	Total	Crude Petroleum and Natural Gas Fields	Field Service Workers	Total Manufacturing	Petroleum Refining
1985	$11.95	$11.04	$13.31	$10.13	$9.52	$15.25
1986	12.45	11.54	13.74	10.25	9.73	15.32
1987	12.45	11.42	14.04	9.98	9.91	15.72

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

Section V
Table 2

NUMBER OF EMPLOYEES
PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING
(Annual Average in Thousands)

	Petroleum and Natural Gas Extraction		
Year	Crude Petroleum and Natural Gas Fields	Field Service Workers	Petroleum Refining
1947	164.0	N.A.	189.3
1948	173.6	N.A.	196.6
1949	173.1	N.A.	191.6
1950	166.8	N.A.	185.4
1951	169.1	N.A.	198.6
1952	177.2	N.A.	201.6
1953	181.3	N.A.	206.3
1954	184.7	N.A.	203.6
1955	189.0	N.A.	201.3
1956	192.3	N.A.	200.8
1957	194.5	N.A.	198.9
1958	192.4	135.0	190.4
1959	185.4	144.2	181.4
1960	178.2	131.1	177.2
1961	171.3	131.8	168.4
1962	167.6	130.4	160.5
1963	163.8	125.4	153.7
1964	160.4	130.7	149.6
1965	156.6	130.5	148.1
1966	152.5	129.2	148.2
1967	149.7	126.2	147.9
1968	148.1	127.5	150.1
1969	145.8	134.1	144.7
1970	144.2	125.9	153.7
1971	142.5	121.7	152.7
1972	142.7	125.5	152.3
1973	142.1	135.6	149.9
1974	148.5	156.0	155.4
1975	159.5	176.2	154.2
1976	165.0	195.3	157.1
1977	174.8	229.7	159.5

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

PETROLEUM INDUSTRY EMPLOYMENT(1)
(In Thousands)

Year	Extraction(2)	Refining	Paving and Roofing	Oil Pipelines	Gas Production and Distribution	Wholesale	Retail	Total
1977	381.4	159.5	31.6	18.5	158.8	229.7	628.7	1,608.2
1978	429.3	164.1	32.3	19.6	163.5	229.4	628.0	1,666.2
1979	474.2	165.2	32.6	20.1	167.1	225.4	576.9	1,661.5
1980	559.7	154.8	31.0	21.3	168.0	223.9	560.8	1,719.5
1981	692.1	172.8	28.9	21.8	174.0	231.5	562.2	1,883.3
1982	708.3	164.2	25.0	21.3	176.9	222.6	559.0	1,877.3
1983	597.8	158.2	26.3	20.1	173.5	210.9	556.2	1,743.0
1984	606.5	151.1	26.7	19.1	173.2	208.3	574.7	1,759.6
1985	582.9	141.4	26.3	18.7	174.8	205.9	588.5	1,738.5
1986	450.0	131.1	26.1	18.1	167.4	200.5	596.0	1,589.7
Jan.	557.8	134.3	23.6	18.5	171.6	200.6	582.7	1,688.9
Feb.	535.4	133.5	23.3	18.2	170.1	200.1	579.9	1,660.5
Mar.	506.5	133.5	24.4	18.0	167.7	200.1	583.9	1,634.1
Apr.	471.3	133.1	26.2	18.0	166.2	199.9	587.9	1,602.6
May	444.6	132.8	27.4	17.9	166.7	200.9	594.1	1,584.4
Jun.	434.4	133.0	27.6	18.4	167.3	201.6	601.0	1,583.4
Jul.	430.5	132.5	27.7	18.7	169.9	202.9	604.4	1,586.6
Aug.	417.4	131.2	28.0	18.4	169.3	203.1	608.4	1,575.8
Sep.	404.5	129.0	27.6	18.1	163.4	201.0	605.0	1,548.6
Oct.	402.9	127.7	27.0	17.9	164.4	199.4	600.5	1,539.8
Nov.	401.8	127.1	26.1	17.8	166.2	199.2	600.4	1,537.6
Dec.	398.2	125.2	23.9	17.6	165.8	197.9	604.3	1,532.9
1987	405.2	126.7	26.3	18.2	165.7	198.4	609.6	1,550.1
Jan.	393.7	126.0	23.1	17.8	164.7	196.6	603.9	1,525.8
Feb.	388.8	125.7	23.3	17.8	164.0	196.4	600.8	1,516.8
Mar.	386.3	126.0	24.3	17.9	163.8	195.7	599.8	1,513.8
Apr.	389.5	125.8	25.9	17.8	164.0	196.1	602.3	1,521.4
May	393.8	126.2	27.5	18.0	164.6	197.0	609.3	1,536.4
Jun.	400.5	127.3	28.2	18.5	167.8	198.6	614.8	1,555.7
Jul.	406.7	127.8	27.9	18.7	168.9	199.6	618.2	1,567.8
Aug.	412.4	127.8	28.2	18.7	168.5	200.1	618.0	1,573.7
Sep.	416.6	127.0	28.2	18.4	166.1	199.6	612.9	1,568.8
Oct.	423.8	127.0	27.8	18.3	165.5	199.6	610.4	1,572.4
Nov.	424.3	127.1	26.6	18.2	165.1	200.5	610.4	1,572.2
Dec.	425.4	127.2	24.8	18.3	165.4	201.4	614.4	1,576.9
1988								
Jan.	418.0	127.4	23.4	17.9	165.2	200.1	612.9	1,564.9
Feb.	413.9	125.7	23.3	15.9	164.5	200.2	615.4	1,558.9
Mar.	414.7	125.3	24.0	15.9	164.7	200.8	618.5	1,563.9
Apr.	416.2	125.3	26.3	15.9	165.1	201.4	622.2	1,572.4
May	418.2	127.4	27.1	16.1	166.2	202.6	630.6	1,588.2
Jun.	421.3	128.7	27.8	16.7	169.7	204.4	636.8	1,605.4
Jul.	423.2	129.5	27.9	17.0	170.8	206.3	641.4	1,616.1
Aug.	422.5	129.4	27.8	16.9	170.5	206.4	642.7	1,616.2

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(1) Total employment by establishment--includes production workers, clerical and white collar employees.
(2) Includes employees of production companies and oil field service companies.

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

Section V
Table 3

SOURCES OF CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Millions of dollars)

Year	Internal Funds	External Funds	Total Funds
1947	$ 2,221	$ 682	$ 2,903
1948	3,250	592	3,842
1949	2,971	641	3,612
1950	3,285	159	3,444
1951	3,847	316	4,163
1952	4,092	831	4,923
1953	4,591	520	5,111
1954	4,897	353	5,250
1955	5,429	520	5,949
1956	6,351	1,222	7,573
1957	6,536	1,211	7,747
1958	5,806	970	6,776
1959	6,211	241	6,452
1960	6,401	245	6,646
1961	6,892	649	7,541
1962	7,280	677	7,957
1963	7,710	925	8,635
1964	7,905	990	8,895
1965	8,681	1,196	9,877
1966	10,085	2,032	12,117
1967	10,682	2,791	13,473
1968	11,280	4,015	15,295
1969	11,715	2,998	14,713
1970	14,333	4,156	18,489
1971	15,132	5,059	20,191
1972	16,164	4,632	20,796
1973	23,211	4,786	27,997
1974	32,510	6,232	38,742
1975	23,931	10,129	34,060
1976	28,254	10,310	38,564
1977	33,427	8,678	42,105
1978	38,410	4,930	43,340
1979	62,828	8,568	71,396
1980	70,721	11,900	82,621
1981	64,930	16,585	81,515
1982	67,167	15,430	82,597
1983	66,962	8,707	75,669
1984	48,811	22,347	71,158

Source: The Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies"

Section V
Table 4

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Autos and Trucks	20.7	25.4	30.2	32.5	17.6	18.7	19.4	18.0	29.8	14.6	16.4	9.1	16.9	16.9	13.2
Drugs Soaps, etc.	20.7	21.3	16.2	21.4	17.7	13.7	15.1	14.8	17.6	19.9	21.5	21.9	22.0	20.4	18.4
Office Equip.	26.7	24.3	18.4	19.3	16.9	14.3	13.2	14.7	16.7	17.5	18.0	13.7	14.4	14.2	16.1
Glass Products	17.6	15.5	19.8	24.4	15.2	14.6	14.9	16.2	20.6	17.7	15.6	11.9	16.7	13.4	11.1
Elect.Equip.& Electronics	19.9	20.3	17.3	22.5	16.0	14.8	14.9	13.9	13.1	11.8	13.9	12.4	14.4	11.4	10.0
Auto Parts	23.4	22.9	18.9	22.7	15.7	13.1	13.2	10.4	15.9	12.9	12.1	7.4	13.1	7.3	6.8
Chemical Prod.	17.2	16.9	17.1	21.4	16.3	13.5	13.2	14.4	17.5	15.5	14.0	11.1	14.7	12.4	11.8
Household Equip.	33.2	26.6	15.4	23.0	12.9	12.5	10.7	10.3	12.2	12.7	9.6	7.7	14.1	10.0	9.2
Aircraft and Space	-	2.9	8.2	14.3	9.1	17.9	20.1	27.1	24.3	21.4	20.0	14.1	9.0	6.6	4.4
Soft Drinks	22.6	17.9	16.5	15.6	12.6	12.0	12.6	12.4	14.3	14.3	14.5	14.4	17.1	16.8	15.6
Other Stove and Clay Prod.	17.8	18.2	13.7	18.5	14.9	12.5	11.8	13.2	16.5	16.0	13.2	11.9	14.6	12.1	11.1
Lumber	33.1	23.1	10.7	17.0	16.0	11.4	10.3	9.7	14.0	12.6	9.5	9.2	11.7	7.5	6.6
Paper and Allied Prod.	23.7	19.6	12.8	17.1	16.1	12.0	12.2	12.4	14.0	14.2	10.6	9.3	10.5	9.1	8.1
Paint and Allied Prod.	19.0	13.1	10.3	17.1	12.9	10.7	12.7	13.6	16.3	18.0	15.8	12.8	12.5	13.0	12.5
Banking	20.4	21.0	17.8	15.9	12.3	12.2	12.0	11.4	12.0	12.2	12.5	11.7	11.5	11.6	9.7
Machinery	17.0	18.6	12.4	14.2	14.9	14.1	12.9	11.7	11.6	15.2	13.7	7.9	9.8	9.9	8.9
Rubber and Allied Prod.	16.0	13.4	8.7	15.9	16.4	13.4	14.0	11.9	15.3	13.8	12.4	10.6	12.9	10.3	10.2
Printing and Publ.	19.9	14.3	14.7	14.5	11.8	11.0	10.5	10.9	13.0	13.8	14.0	11.3	12.8	13.9	11.9
Petroleum	15.9	21.6	13.6	15.1	16.7	14.5	14.7	13.8	14.1	14.6	13.7	9.9	10.0	10.3	10.4
Other Food Prod.	21.2	16.9	14.0	15.4	11.8	10.0	11.1	11.5	11.8	11.7	11.5	11.4	11.8	11.4	12.8
Other Metal Prod.	15.7	17.1	11.1	16.4	14.9	11.4	11.5	11.1	12.8	12.5	12.0	8.9	11.4	6.8	7.3
Brewing	26.4	18.4	22.1	15.1	11.6	10.8	10.8	8.2	8.7	7.7	7.4	6.8	7.8	7.7	9.5
Building,Heat,Plumb. Equip.	19.6	20.1	12.6	17.8	13.8	10.9	10.2	9.8	11.3	11.3	9.4	8.1	9.1	5.3	4.6
Dairy Prod.	15.2	13.0	15.5	13.9	11.0	10.4	11.2	12.4	12.1	12.4	11.9	11.9	11.8	11.3	11.0
Non Ferrous Metals	14.8	15.3	8.0	14.5	13.5	11.5	11.0	10.8	16.6	17.2	9.7	6.8	8.9	7.2	6.8
Furniture and Fixtures	17.1	18.3	10.9	18.7	13.1	10.1	9.8	9.5	12.9	14.2	7.8	8.6	10.5	7.9	7.1
Iron and Steel	11.3	13.9	11.6	15.3	12.3	8.8	11.6	9.4	15.2	13.9	13.2	8.2	8.4	7.8	6.4
Total Manufacturing	17.0	18.2	13.8	17.1	14.4	11.3	12.7	12.3	14.9	13.8	12.9	9.8	11.7	10.6	9.9
Total Mining	16.0	20.5	12.0	13.2	13.0	10.1	7.9	8.2	13.0	13.8	9.6	7.3	7.8	8.0	8.3
Total Trade	18.3	18.2	13.2	14.8	11.5	10.1	9.9	9.9	10.9	11.4	10.8	10.5	11.9	10.7	10.2

Source: First National City Bank

NET INCOME AS A PERCENT OF NET WORTH PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Autos & Trucks	19.4	19.6	19.9	23.4	17.8	12.0	16.6	13.8	5.8	15.0	17.2	17.6	6.1	5.7
Drugs & Medicine	17.8	18.7	19.8	22.1	22.5	20.3	19.8	17.7	18.8	19.0	19.8	21.4	21.0	20.4
Soap, Cosmetics	17.0	16.9	17.6	16.8	17.9	19.4	18.9	18.6	18.7	19.3	20.2	20.2	17.9	18.0
Office Eqpmt., Computers	17.2	18.0	17.9	18.7	18.1	17.8	19.0	17.4	13.9	12.5	13.8	16.7	16.3	15.9
Glass Products	11.6	11.6	12.1	13.5	12.7	11.1	11.9	12.2	9.0	11.1	12.5	12.9	10.6	9.8
Electr.Eqpmt.& Electronics	11.3	10.7	11.3	14.8	16.7	15.4	14.1	13.0	10.1	10.7	13.6	15.3	13.1	12.7
Auto Parts	10.2	11.4	12.0	13.4	14.0	11.4	12.6	13.0	8.9	10.4	13.5	14.4	10.4	9.6
Chemical Products	12.3	13.2	14.7	15.4	[illegible]4.6	11.4	11.7	11.4	9.5	9.7	11.3	15.2	18.8	15.8
Household Appliances	11.5	12.8	13.9	15.0	15.0	14.7	14.0	13.5	11.9	12.1	15.4	15.6	5.3	6.2
Aerospace	12.9	11.7	12.9	15.4	15.7	13.4	13.9	11.4	6.7	6.3	8.9	11.7	13.8	11.7
Soft Drinks	16.6	17.9	20.7	21.1	22.0	23.3	22.7	22.5	22.7	23.1	22.1	22.0	19.0	20.0
Other Stone & Clay Prod.	9.0	9.1	10.6	9.9	9.2	7.3	8.9	9.3	7.0	8.7	10.8	11.9	9.1	8.2
Lumber & Wood Prod.	7.6	8.1	10.9	11.5	11.0	9.4	14.1	15.2	10.2	11.2	12.6	20.8	15.9	10.0
Paper & Allied Prod.	9.3	9.2	10.3	10.5	11.8	9.5	10.7	10.3	7.4	5.6	8.8	14.6	18.3	12.7
Paint & Allied Prod.	11.6	12.0	14.4	14.1	14.3	11.6	11.5	10.2	6.2	8.1	10.6	10.3	11.7	9.0
Baking	9.9	11.0	11.3	11.9	13.9	15.7	13.4	7.9	11.0	12.8	11.8	9.4	12.0	17.0
Machinery	9.9	9.7	11.9	14.4	16.9	14.7	13.5	12.9	10.5	10.3	10.6	12.7	12.2	11.6
Rubber & Allied Prod.	9.4	9.9	11.5	11.8	12.8	10.8	12.7	11.1	7.6	9.8	11.6	11.5	9.7	7.8
Printing & Publishing	10.5	12.4	14.0	16.9	17.9	15.4	14.9	14.8	12.5	12.6	13.8	15.4	14.5	12.5
Petroleum Prod'n Refng.	10.6	11.5	11.6	11.9	12.6	12.8	13.1	11.9	11.0	11.2	10.8	15.6	19.6	13.9
Building,Heat. Plumb.Equip.	6.3	6.4	8.2	10.6	12.0	11.3	11.3	8.5	7.0	8.4	12.1	11.6	14.2	12.3
Other Food Products	12.5	12.1	12.7	12.6	13.3	12.3	12.7	12.1	12.8	12.3	14.2	14.8	14.4	14.1
Other Metal Products	9.0	9.3	10.4	12.9	14.1	13.8	13.3	12.5	10.4	8.9	10.4	12.9	14.0	13.0
Brewing	8.9	9.1	10.1	11.1	13.4	12.2	13.2	13.2	16.0	15.8	14.8	13.1	12.3	10.3
Dairy Products	10.5	11.2	12.2	12.5	12.6	11.8	11.7	11.8	12.0	12.6	12.8	13.0	13.2	14.3
Non Ferrous Metals	7.1	7.1	9.0	11.8	15.7	11.4	11.1	12.5	10.6	5.0	7.1	11.2	15.1	7.4
Furniture & Fixtures	7.8	8.1	11.1	13.0	14.3	11.9	11.3	12.4	8.4	11.9	12.5	13.0	8.2	7.0
Iron & Steel	5.4	7.3	9.2	9.6	9.4	7.4	8.5	7.4	4.6	4.6	6.1	9.8	17.1	10.0
Total Manufacturing	10.9	11.6	12.7	13.9	14.2	12.6	13.3	12.4	10.8	10.8	12.1	14.9	15.2	12.6
Total Mining	8.6	9.1	10.4	12.2	13.9	16.2	15.0	12.6	8.5	8.5	10.7	16.6	24.5	16.1
Total Trade	10.3	10.4	12.1	13.2	13.7	13.2	14.1	13.5	11.7	11.7	11.8	12.7	13.5	13.0

Source: First National City Bank

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1976	1977	1978	1979	1980	1981(p)
Autos & Trucks	18.3	20.8	17.4	10.5	-13.6	-6.0
Drugs & Medicine	20.0	19.2	22.0	22.9	22.2	19.4
Soap, Cosmetics	18.3	19.7	20.9	19.9	19.7	18.1
Office Eqpmt., Computers	17.4	18.8	23.3	20.7	21.2	18.1
Glass Products	17.3	11.5	11.1	14.6	12.9	11.3
Elec.Eqpmt.,& Electronics	16.2	16.7	17.5	17.3	18.7	17.5
Auto Parts	15.3	16.4	17.4	18.2	11.9	16.2
Chemical Products	16.1	14.3	14.9	17.3	16.5	16.7
Household Appliances	17.4	19.4	16.8	16.6	14.3	13.6
Aerospace	13.6	17.4	17.0	21.8	17.7	12.7
Soft Drinks	22.4	22.3	22.3	22.3	20.9	23.0
Other Stone & Clay Prod.	10.6	12.2	17.2	14.5	5.5	10.4
Lumber & Wood Products	15.5	16.0	17.7	20.2	11.0	8.3
Paper & Allied Products	14.8	14.1	14.0	17.4	13.8	14.0
Paint & Allied Products	10.9	8.1	8.8	11.0	12.8	13.4
Baking	16.1	17.8	19.7	17.4	17.4	18.1
Machinery	13.6	15.0	16.5	18.3	14.3	14.4
Rubber & Allied Prod.	7.5	10.0	6.2	6.4	4.2	10.9
Printing & Publishing	13.9	16.8	21.2	19.4	18.5	19.0
Petroleum Prod'n. & Refing.	14.8	14.0	14.5	22.6	25.4	20.2
Building, Heating, Plumbing Equipment	21.0	20.4	21.8	26.0	22.4	18.3
Other Food Products	16.1	16.3	17.6	17.3	17.8	19.1
Other Metal Products	15.0	14.8	13.6	16.5	13.7	13.1
Brewing	11.5	10.5	10.1	12.5	16.0	15.9
Dairy Products	14.7	14.9	15.6	14.8	16.2	14.5
Non Ferrous Metals	8.5	8.0	9.4	18.6	18.5	10.5
Furniture & Fixtures	9.8	8.5	11.6	7.2	9.0	12.8
Iron & Steel	8.7	4.4	9.4	11.7	10.0	12.2
Total Manufacturing	15.0	14.9	15.9	18.4	16.5	15.7
Total Mining	16.5	8.5	8.2	19.8	19.1	19.2
Total Trade	14.7	15.0	15.3	15.7	13.8	13.6

(p) Preliminary

Source: First National City Bank

Section V
Table 5

DOMESTIC AND FOREIGN NET INCOME OF A GROUP OF PETROLEUM COMPANIES
(Millions of Dollars)

Year	NET INCOME		
	U.S.	Foreign	Total
1960	$ 1,887	$ 1,581	$ 3,468
1961	1,958	1,719	3,677
1962	2,044	1,963	4,007
1963	2,392	2,149	4,541
1964	2,556	2,156	4,712
1965	2,927	2,164	5,091
1966	3,438	2,214	5,652
1967	3,727	2,421	6,148
1968	3,913	2,751	6,664
1969	3,774	2,928	6,702
1970	3,609	3,029	6,638
1971	3,372	3,753	7,125
1972	3,526	3,155	6,681
1973	4,008	7,396	11,404
1974	6,119	9,931	16,050
1975	5,623	5,530	11,513
1976	7,165	5,462	12,627
1977	7,420	6,565	13,985
1978	7,968	6,582	14,550
1979	12,237	18,383	30,620
1980	15,073	19,047	34,120
1981	15,916	12,537	28,453
1982	12,831	8,431	21,262
1983	9,573	10,465	20,038
1984	9,191	10,874	20,065
1985	8,289	10,410	18,699

SOURCE: Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies"

Section V
Table 6

WORLD PETROLEUM INDUSTRY CAPITAL AND EXPLORATION EXPENDITURES
UNITED STATES versus FOREIGN
(Millions of U.S. dollars)

Year	CAPITAL EXPENDITURES			GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS			COMBINED		
	United States	Foreign	World Total	United States	Foreign	World Total	United States	Foreign	World Total
1947	2,825	1,225	4,050	250	70	320	3,075	1,295	4,370
1948	3,350	1,600	4,950	300	100	400	3,650	1,700	5,350
1949	3,000	1,925	4,925	325	100	425	3,325	2,025	5,350
1950	2,925	1,500	4,425	300	125	425	3,225	1,625	4,850
1951	3,625	1,700	5,325	400	150	550	4,025	1,850	5,875
1952	4,400	2,350	6,750	500	175	675	4,900	2,525	7,425
1953	5,025	2,550	7,575	575	175	750	5,600	2,725	8,325
1954	5,350	2,725	8,075	600	200	800	5,950	2,925	8,875
1955	5,600	2,950	8,500	625	250	875	6,225	3,200	9,425
1956	6,050	3,975	10,025	700	300	1,000	6,750	4,275	11,025
1957	6,400	5,000	11,400	700	375	1,075	7,100	5,375	12,475
1958	5,300	5,400	10,700	650	400	1,050	5,950	5,800	11,750
1959	5,272	5,775	11,050	650	470	1,120	5,925	6,245	12,170
1960	5,175	5,350	10,525	625	460	1,085	5,800	5,810	11,610
1961	5,100	5,325	10,425	600	420	1,020	5,700	5,745	11,445
1962	5,725	5,385	11,110	575	425	1,000	6,300	5,800	12,100
1963	5,475	5,675	11,150	600	450	1,050	6,075	6,125	12,200
1964	6,100	6,175	12,275	650	480	1,130	6,750	6,655	13,405
1965	6,375	6,800	13,175	610	570	1,180	6,985	7,370	14,355
1966	7,125	7,550	14,675	650	460	1,110	7,775	8,010	15,785
1967	7,650	7,925	15,575	615	575	1,190	8,265	8,500	16,765
1968	8,350	9,550	17,900	715	615	1,330	9,065	10,165	19,230
1969	8,175	10,200	18,375	725	655	1,380	8,900	10,855	19,755
1970	8,225	11,900	20,125	665	675	1,340	8,890	12,575	21,465
1971	7,250	14,550	21,800	715	680	1,395	7,965	15,230	23,195
1972	9,050	15,900	24,950	740	800	1,540	9,790	16,700	26,490
1973	10,640	19,355	29,995	850	850	1,700	11,490	20,205	31,695
1974	16,625	27,075	43,700	1,130	1,055	2,185	17,755	28,130	45,885

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry, Annual

Section V
Table 6a

WORLD PETROLEUM INDUSTRY CAPITAL AND EXPLORATION EXPENDITURES
UNITED STATES versus FOREIGN
(Millions of U.S. dollars)

Year	CAPITAL EXPENDITURES			GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS			COMBINED		
	United States	Foreign	World Total	United States	Foreign	World Total	United States	Foreign	World Total
1947	2,825	1,225	4,050	250	70	320	3,075	1,295	4,370
1975	17,725	31,900	49,625	1,195	1,130	2,325	18,920	33,030	51,950
1976	22,085	34,640	56,725	1,375	1,160	2,535	23,460	35,800	59,260
1977	22,400	39,180	61,580	1,645	1,750	3,395	24,045	40,930	64,975
1978	24,475	43,900	68,375	1,975	2,060	4,035	26,450	45,960	72,410
1979	32,200	49,425	81,625	2,600	2,725	5,325	34,800	52,150	86,950
1980	42,900	62,625	105,525	3,850	3,775	7,625	46,750	66,400	113,150
1981	63,000	75,600	138,600	5,700	4,900	10,600	68,700	80,500	149,200
1982	63,550	75,875	139,425	4,500	5,100	9,600	68,050	80,975	149,025
1983	45,600	66,175	111,775	4,250	4,175	8,425	49,850	70,350	120,200
1984	45,850	60,925	106,775	4,075	4,300	8,375	49,925	65,225	115,150

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry, Annual

Section V
Table 7

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	FUNDS AVAILABLE FROM					FUNDS USED FOR				
Year	Cash Earnings	Long Term Debt Issued	Stock Issued	Other	Total	Capital Expenditures	Dividends	Long Term Debt Repaid	Other	Total
1947	2,160	476	206	61	2,903	2,076	455	62	135	2,728
1948	3,099	476	116	151	3,842	2,591	508	101	366	3,566
1949	2,704	603	38	267	3,612	2,263	603	144	224	3,231
1950	3,080	152	7	205	3,444	1,894	724	224	188	3,030
1951	3,706	258	58	141	4,163	2,540	884	144	103	3,671
1952	3,902	701	130	190	4,923	3,100	939	143	255	4,437
1953	4,379	511	9	212	5,111	3,378	1,019	148	261	4,806
1954	4,592	344	9	305	5,250	3,669	1,041	196	181	5,087
1955	5,200	474	46	229	5,949	3,905	1,163	217	295	5,580
1956	5,866	1,166	56	485	7,573	4,988	1,324	249	484	7,045
1957	6,318	714	497	218	7,747	5,453	1,414	431	219	7,517
1958	5,531	908	62	275	6,776	4,356	1,419	543	174	6,492
1959	5,892	215	26	319	6,452	4,266	1,468	327	209	6,270
1960	6,174	240	5	227	6,646	4,241	1,505	250	326	6,322
1961	6,388	587	62	504	7,541	4,560	1,582	578	332	7,052
1962	6,869	504	173	411	7,957	5,198	1,761	516	603	8,078
1963	7,492	628	297	218	8,635	4,926	1,920	462	695	8,003
1964	7,719	570	420	186	8,895	5,849	2,104	499	653	9,105
1965	8,425	1,085	111	256	9,877	6,421	2,289	407	585	9,702
1966	9,292	1,848	184	793	12,117	7,731	2,479	807	744	11,761
1967	10,080	2,328	463	602	13,473	8,734	2,699	644	548	12,625
1968	10,958	3,622	393	322	15,295	9,690	2,950	992	829	14,461
1969	11,238	2,732	266	477	14,713	9,766	3,140	1,841	798	15,545
1970	13,371	3,725	431	962	18,489	11,393	3,711	1,905	851	17,860
1971	14,389	5,059	(3)	743	20,191	12,511	3,836	2,029	972	19,348
1972	14,377	4,632	(3)	1,787	20,796	12,717	3,774	3,258	751	20,500
1973	20,623	4,786	(3)	2,588	27,997	14,247	4,056	4,023	381	22,707
1974	28,165	6,232	(3)	4,345	38,742	22,270	4,681	4,262	894	32,107

(3) Included in Long Term Debt Issued.
(4) Includes preferred and common stock retired.

Source: The Chase Manhattan Bank, Financial Analysis of a Group of Petroleum Companies

Section V
Table 7a

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	FUNDS AVAILABLE FROM					FUNDS USED FOR				
Year	Cash Earnings	Long Term Debt Issued	Stock Issued	Other(1)	Total	Capital Expenditures	Dividends	Long Term Debt Repaid	Other(2)	Total
1975	22,714	10,129	(3)	1,217	34,060	24,205	4,819	5,316	1,740	36,080
1976	25,828	10,310	(3)	2,426	38,564	26,036	5,208	5,230	829	37,303
1977	29,003	8,678	(3)	4,424	42,105	27,156	5,995	5,954	1,508	40,613
1978	33,184	4,930	(3)	5,226	43,340	28,770	6,781	6,885	1,562	43,998
1979	55,844	8,568	(3)	6,984	71,396	42,229	8,127	8,249	2,473	61,078
1980	66,859	11,900	(3)	5,862	82,821	53,776	10,305	9,728	2,613	76,422
1981	63,207	16,585	(3)	1,723	81,515	63,976	11,068	10,020	4,867	89,931
1982	60,884	14,980	450	6,283	82,597	64,538	11,265	9,281	3,731	90,019
1983	60,256	8,407	300	6,706	75,669	49,521	11,057	7,524	4,507	72,609
1984	57,200	24,900	1,200	4,100	87,400	44,300	10,600	7,000	35,000	96,900
1985	70,200	22,700	500	19,500	113,000	49,800	12,500	27,100	26,800	116,100
1986	54,100	14,800	1,200	22,700	92,700	35,000	13,000	19,000	14,200	81,200

(1) Other includes sales of assets and other transactions and, in 1984-85 includes mergers and acquisitions.
(2) Other includes investments and advancements and preferred and common stock retired.
(3) Included in Long Term Debt Issued.

Source: The Chase Manhattan Bank, Financial Analysis of a Group of Petroleum Companies

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	PRODUCTION		TRANSPORTATION		REFINERIES & CHEMICAL PLANTS	
Year	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1947	1,750	475	295	310	400	225
1948	2,100	685	310	255	600	405
1949	2,000	770	250	405	420	475
1950	2,100	475	215	430	275	375
1951	2,650	575	285	410	325	400
1952	3,200	890	385	505	470	490
1953	3,525	890	425	610	675	620
1954	3,800	970	325	740	800	585
1955	4,100	1,110	225	655	835	580
1956	4,475	1,725	225	775	825	725
1957	4,525	2,180	345	1,060	950	980
1958	3,650	1,925	350	1,520	725	1,045
1959	3,850	2,030	260	1,720	525	1,020
1960	3,735	1,875	265	1,395	560	1,030
1961	3,525	1,855	230	1,140	685	1,265
1962	4,000	1,665	340	1,205	660	1,415
1963	3,650	1,520	415	1,155	600	1,765
1964	3,960	1,605	340	1,570	675	1,515
1965	3,760	2,025	265	1,510	1,125	1,665
1966	3,770	1,870	300	1,755	1,575	2,435
1967	4,025	1,975	400	1,740	1,600	2,550
1968	4,925	2,535	475	2,280	1,450	2,980
1969	4,750	2,790	400	2,600	1,525	2,995

	MARKETING		OTHER CAPITAL EXPENDITURES		TOTAL CAPITAL EXPENDITURES	
Year	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1947	300	175	80	40	2,825	1,225
1948	225	165	115	90	3,350	1,600
1949	240	215	90	60	3,000	1,925
1950	275	180	60	40	2,925	1,500
1951	300	245	65	70	3,625	1,700
1952	280	375	65	90	4,400	2,350
1953	325	360	75	70	5,025	2,550
1954	350	385	75	45	5,350	2,725
1955	375	535	65	70	5,600	2,950
1956	450	685	75	65	6,050	3,975
1957	475	710	105	70	6,400	5,000
1958	400	745	175	165	5,300	5,400
1959	450	885	190	120	5,275	5,775
1960	475	950	140	100	5,175	5,350
1961	525	930	135	135	5,100	5,325
1962	600	985	125	105	5,725	5,375
1963	650	1,085	160	150	5,475	5,675
1964	850	1,340	275	145	6,100	6,175
1965	1,000	1,430	225	170	6,375	6,800
1966	1,100	1,310	380	180	7,125	7,550
1967	1,250	1,455	375	205	7,650	7,925
1968	1,150	1,515	350	240	8,350	9,550
1969	1,250	1,555	250	260	8,175	10,200

Source: The Chase Manhattan Bank

Section V
Table 8a

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

Year	PRODUCTION U.S.	PRODUCTION FOREIGN	TRANSPORTATION U.S.	TRANSPORTATION FOREIGN	REFINERIES & CHEMICAL PLANTS U.S.	REFINERIES & CHEMICAL PLANTS FOREIGN
1970	4,335	2,895	550	2,915	1,625	3,900
1971	3,385	3,830	675	3,435	1,550	4,740
1972	5,915	4,190	425	4,580	1,350	4,955
1973	7,440	5,485	550	7,230	1,475	4,565
1974	11,450	8,085	1,660	9,760	2,600	7,115
1975	9,380	9,875	3,725	11,510	3,600	8,270
1976	13,460	12,315	3,900	12,350	3,775	7,635
1977	15,180	17,280	2,300	8,060	3,700	10,965
1978	17,650	20,055	1,350	7,380	4,050	13,275
1979	24,600	24,465	1,450	6,575	4,625	14,385
1980	33,100	33,775	2,150	7,725	5,650	16,125
1981	51,700	41,675	1,725	10,300	7,250	18,325
1982	52,275	43,400	1,300	7,650	7,550	19,525
1983	37,275	36,575	1,000	7,725	5,100	17,075
1984	38,050	34,650	975	5,925	4,200	15,700

Year	MARKETING U.S.	MARKETING FOREIGN	OTHER CAPITAL EXPENDITURES U.S.	OTHER CAPITAL EXPENDITURES FOREIGN	TOTAL CAPITAL EXPENDITURES U.S.	TOTAL CAPITAL EXPENDITURES FOREIGN
1970	1,450	1,770	265	420	8,225	11,900
1971	1,350	2,030	290	515	7,250	14,550
1972	1,100	1,725	260	450	9,050	15,900
1973	850	1,630	325	445	10,640	19,355
1974	650	1,565	325	550	16,625	27,075
1975	650	1,510	370	735	17,725	31,900
1976	625	1,555	325	785	22,085	34,640
1977	775	1,895	445	980	22,400	39,180
1978	950	2,290	475	980	24,475	43,900
1979	975	2,775	550	1,225	32,200	49,425
1980	1,300	3,750	700	1,250	42,900	62,625
1981	1,425	3,775	900	1,525	63,000	75,600
1982	1,400	3,700	1,025	1,600	63,550	75,875
1983	1,375	3,300	850	1,500	45,600	66,175
1984	1,900	3,275	725	1,375	45,850	60,925

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry

Section V
Table 9

ESTIMATED U.S. EXPLORATION & DEVELOPMENT EXPENDITURES CHASE MANHATTAN BANK GROUP AND ALL OTHER COMPANIES

(Millions of Dollars)

Year	Total Exploration and Development Expenditures	Expenditures by Chase Manhattan Group	Expenditures by All Other Companies
1947	$ 1,950	$ 991	$ 959
1948	2,300	1,318	982
1949	2,215	1,217	998
1950	2,325	1,157	1,168
1951	2,975	1,620	1,355
1952	3,625	1,855	1,770
1953	3,975	2,014	1,961
1954	4,300	2,180	2,120
1955	4,675	2,383	2,292
1956	5,075	2,621	2,454
1957	5,100	2,673	2,427
1958	4,225	2,241	1,984
1959	4,350	2,455	1,895
1960	4,200	2,412	1,788
1961	4,000	2,417	1,583
1962	4,425	2,848	1,577
1963	4,125	2,452	1,673
1964	4,450	2,817	1,633
1965	4,210	2,847	1,363
1966	4,250	2,990	1,260
1967	4,365	3,212	1,153
1968	5,390	4,087	1,303
1969	5,250	3,768	1,482
1970	4,775	3,119	1,656
1971	3,900	2,740	1,160
1972	6,480	4,225	2,255
1973	8,140	5,275	2,865
1974	12,355	8,550	3,805
1975	10,250	7,007	3,243
1976	14,510	8,711	5,799
1977	16,500	10,159	6,341
1978	19,300	11,378	7,922
1979	26,750	20,616	6,134

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry and Financial Analysis of a Group of Petroleum Companies

ESTIMATED U.S. EXPLORATION & DEVELOPMENT EXPENDITURES
CHASE MANHATTAN BANK GROUP AND ALL OTHER COMPANIES
(Millions of Dollars)

Year	Total Exploration and Development Expenditures	Expenditures by Chase Manhattan Group	Expenditures by All Other Companies
1980	36,200	25,053	11,147
1981	56,475	32,765	23,710
1982	55,400	30,902	24,498
1983	40,875	25,537	15,338
1984	41,450	23,010	17,440

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry and Financial Analysis of a Group of Petroleum Companies

Section V
Table 10

U.S. ESTIMATED EXPENDITURES FOR EXPLORATION, DEVELOPMENT AND PRODUCTION, MILLION DOLLARS(1)

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Exploration Expenditures									
Drilling and equipping wells	944.2	1,580.5	2,124.2	2,467.1	3,220.8	4,098.3	5,619.2	8,678.6	13,545.7
Acquiring undeveloped acreage	3,552.0	5,774.0	1,614.5	3,024.3	2.579.5	2,885.4	7,036.5	7,899.2	11,188.2
Land dept. leasing and scouting	76.5	90.6	113.4	126.3	164.1	163.6	223.5	294.7	376.2
Geological and geophysical	399.5	567.6	652.8	692.3	833.3	1,028.7	1,218.2	1,871.1	2,823.0
Lease rental	150.7	177.8	204.7	206.7	245.8	285.3	311.6	429.1	600.4
Test Hole contributions	13.8	8.9	16.9	21.7	32.7	24.5	23.0	28.0	-34.2
Other, incl. direct overhead	106.0	168.6	242.0	240.6	305.2	393.5	523.5	757.0	999.0
General and administrative	203.6	290.9	341.7	404.8	413.5	488.8	661.7	892.8	1,107.5
TOTAL EXPLORATION(3)	5,446.2	8,658.8	5,310.3	7,183.9	7,794.9	9,367.9	15,617.2	20,830.8	30,674.2
Development Expenditures									
Drilling and equipping wells	1,766.8	2,265.2	3,354.6	4,154.4	5,712.9	6,838.7	7,972.5	10,193.4	16,107.5
Lease equipment	572.2	824.1	1,499.6	1,486.8	1,607.9	2,175.0	2,146.0	3,572.8	4,760.3
Acquiring producing acreage	183.1	474.0	303.4	381.4	382.8	450.1	5,511.3	3,414.6	972.6
Improved recovery programs	352.5	625.4	928.9	378.4	461.4	639.3	528.3	941.2	1,458.2
Other, incl. direct overhead	(2)	(2)	(2)	978.9	672.3	467.5	544.3	712.5	801.6
General and administrative	164.6	224.4	336.1	354.8	375.7	440.1	601.2	744.4	915.6
TOTAL DEVELOPMENT(3)	3,039.3	4,413.1	6,422.6	7,734.8	9,212.9	11,010.7	17,303.6	19,578.9	25,015.7
Producing Expenditures									
Direct operating expenditures	2,593.6	3,246.4	3,952.9	4,507.4	5,277.9	6,152.2	7,295.3	9,461.9	13,505.1
Taxes, excl. income tax	924.6	1,534.1	1,746.1	1,897.9	2,098.9	2,379.0	2,750.4	4,564.9	20,557.5
General and administrative	496.8	601.4	768.8	865.5	905.2	1,069.8	1,181.3	1,709.8	2,244.8
Other indirect expenses	193.5	252.1	358.0	369.1	435.6	393.6	538.6	6,508.7	6,638.6
TOTAL PRODUCTION(3)	4,208.5	5,634.2	6,825.8	7,639.9	8,717.4	9,994.6	11,765.6	22,245.2	42,945.8
TOTAL EXPENDITURES(3)	12,694.2	18,706.1	18,558.7	22,558.7	25,725.1	30,373.2	44,686.4	62,655.0	98,635.7

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(1) Data not available prior to 1973
(2) Included in improved recovery programs before 1976
(3) TOTALS DO NOT ADD DUE TO ROUNDING.

Source: U.S. Department of Commerce, Bureau of Census: Annual Survey of Oil and Gas

U.S. ESTIMATED EXPENDITURES FOR EXPLORATION, DEVELOPMENT AND PRODUCTION, MILLION DOLLARS(1)

	1982	1983	1984	1985	1986
Exploration Expenditures					
Drilling and equipping wells	12,935.8	7,045	7,363	6,297	3,048
Acquiring undeveloped acreage	8,163.3	8,052	7,807	4,040	1,335
Land dept. leasing and scouting	458.0	317	379	381	301
Geological and geophysical	2,997.5	2,540	2,619	2,392	1,244
Lease rental	643.7	586	536	541	383
Test Hole contributions	47.2	49	75	16	125
Other, incl. direct overhead	1,192.0	N.A.	N.A.	N.A.	N.A.
General and administrative	1,420.8	2,491(3)	2,719(3)	2,732(3)	2,032(3)
TOTAL EXPLORATION(2)	27,858.3	21,080	21,498	16,399	8,468
Development Expenditures					
Drilling and equipping wells	15,578.0	18,340	18,693	17,411	9,257
Lease equipment	5,134.6	3,698	4,495	5,029	3,526
Acquiring producing acreage	1,511.5	N.A.	N.A.	N.A.	N.A.
Improved recovery programs	1,943.8	1,062	1,239	1,822	1,140
Other, incl. direct overhead	740.2	N.A.	N.A.	N.A.	N.A.
General and administrative	950.7	2,068(3)	2,129(3)	2,974(3)	2,431(3)
TOTAL DEVELOPMENT (2)	25,858.8	25,168	26,556	27,236	16,354
Producing Expenditures					
Direct operating expenditures	14,405.3	14,457	14,829	18,233	14,720
Taxes, excl. income tax	14,008.3	16,860	14,895	11,426	4,317
General and administrative	3,047.8	N.A.	N.A.	N.A.	N.A.
Other indirect expenses	6,605.8	4,358(4)	4,187(4)	4,490(4)	4,192
TOTAL PRODUCTION(2)	38,067.2	35,675	33,911	34,149	23,218
TOTAL EXPENDITURES(2)	91,784.3	81,923	81,965	77,784	48,040

(1) Data not available prior to 1973
(2) Totals may not add due to rounding.
(3) Includes Other, including direct overhead.
(4) Includes general and administrative.

Source: 1982--U.S. Department of Commerce, Bureau of Census: Annual Survey of Oil and Gas.
1983-1986--American Petroleum Institute: Survey of Oil and Gas Expenditures, 1986.

Section V
Table 11

ENVIRONMENTAL PROTECTION EXPENDITURES OF THE PETROLEUM INDUSTRY WITHIN THE U.S.(1)

(Millions of Dollars)

YEAR	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
TOTAL EXPENDITURES														
1. Air	$125	$167	$187	$231	$320	$571	$550	$737	$932	$1,039	$1,216	$1,188	$1,349	$1,616
2. Water	146	191	205	224	303	415	379	402	530	629	822	950	884	1,001
3. Land and other	-	-	-	-	60	101	91	100	150	456	336	383	194	203
TOTAL	$271	$358	$392	$455	$683	$1,087	$1,020	$1,239	$1,612	$2,124	$2,374	$2,521	$2,427	$2,820
CAPITAL EXPENDITURES														
1. Air	$69	$100	$112	$145	$181	$391	$305	$436	$527	$601	$536	$339	$429	$561
2. Water	79	114	128	136	163	224	184	194	271	356	411	434	340	394
3. Land and other	-	-	-	-	34	57	51	52	97	396	269	184	89	92
TOTAL	$148	$214	$240	$281	$378	$672	$540	$682	$895	$1,353	$1,216	$957	$858	$1,047
ADMINISTRATIVE, OPERATING, AND MAINTENANCE EXPENDITURES														
1. Air	$43	$50	$53	$62	$108	$143	$198	$251	$352	$389	$635	$792	$864	$997
2. Water	57	66	75	84	136	185	187	201	249	262	401	502	532	594
3. Land and other	-	-	-	-	24	41	37	43	50	55	63	197	101	106
TOTAL	$100	$116	$128	$146	$268	$369	$422	$495	$651	$706	$1,099	$1,491	$1,497	$1,697
RESEARCH AND DEVELOPMENT EXPENDITURES														
1. Air	$13	$17	$22	$24	$31	$37	$47	$50	$53	$49	$45	$57	$56	$58
2. Water	10	11	2	4	4	6	8	7	10	11	10	14	12	13
3. Land and other	-	-	-	-	2	3	3	5	3	5	4	2	4	5
TOTAL	$23	$28	$24	$28	$37	$46	$58	$62	$66	$65	$59	$73	$72	$76

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(1) Totals reported are sums of the expenditures reported to API, not total expenditures of the industry.

Source: American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry 1971-1980

Section V
Table 11a

ENVIRONMENTAL PROTECTION EXPENDITURES OF THE PETROLEUM INDUSTRY WITHIN THE U.S.(1)
(Millions of Dollars)

YEAR	1980	1981	1982	1983	1984
TOTAL EXPENDITURES					
1. Air..............	$2,184	$2,311	$2,553	$2,014	$1,870
2. Water............	1,299	1,786	1,705	1,552	1,572
3. Land and other...	357	516	551	439	504
TOTAL...........	$3,840	$4,613	$4,809	$4,005	$3,946
CAPITAL EXPENDITURES					
1. Air..............	$728	$711	$932	$497	$420
2. Water............	527	804	745	627	595
3. Land and other...	183	273	282	178	211
TOTAL..........	$1,438	$1,788	$1,959	$1,302	$1,226
ADMINISTRATIVE, OPERATING AND MAINTENANCE EXPENDITURES					
1. Air..............	$1,392	$1,538	$1,554	$1,457	$1,395
2. Water............	754	960	933	901	953
3. Land and other...	165	231	248	243	278
TOTAL..........	$2,311	$2,729	$2,735	$2,601	$2,626
RESEARCH AND DEVELOPMENT EXPENDITURES					
1. Air..............	$64	$62	$67	$60	$55
2. Water............	18	22	27	18	15
3. Land and other...	9	12	21	102	94
TOTAL...........	$91	$96	$115	$102	$115

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(1) Totals reported are sums of the expenditures reported to API, not total expenditures of the industry.

Source: American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976
TOTAL REVENUE	$ 58,091.3	$ 64,115.8	$ 69,511.4	$ 77,164.3	$ 83,835.9	$ 104,494.0	$ 184,306.2	$ 191,788.1	$ 217,055.1
DEDUCTIONS:									
Payroll and Benefits	6,196.8	6,775.4	7,276.0	8,246.9	8,863.0	9,430.2	10,839.6	12,689.6	13,610.2
Depreciation, Depletion and Amortization	3,948.1	4,234.1	4,637.5	4,971.7	5,240.6	5,796.5	6,744.0	7,619.5	7,621.9
Interest	722.7	948.2	1,105.1	1,224.7	1,301.1	1,414.9	1,619.9	1,657.9	1,968.9
Other Costs and Expenses	33,289.1	37,444.2	40,776.1	44,440.3	48,781.0	60,572.5	123,059.6	130,265.3	154,729.8
Total Taxes	8,368.1	9,144.5	10,367.0	12,415.8	13,858.6	18,240.8	29,357.8	30,111.1	28,151.7
TOTAL DEDUCTIONS	$52,524.8	$58,546.4	$64,161.7	$71,299.4	$ 78,044.3	$ 95,454.9	$171,620.9	$182,343.4	$206,082.5
NET INCOME	$5,571.9	$5,389.2	$5,551.6	$5,669.2	$ 5,533.6	$ 9,081.5	$ 12,650.9	$ 9,442.2	$ 10,990 3

Due to mergers, the number of companies used in the sample has decreased from 23 to 19. Based on this new sample, all numbers for previous years have been revised. The companies included in current sample are:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corporation
Ashland Oil, Inc.
Atlantic Richfield Co.
Chevron Corporation
Diamond Shamrock Corp.
Exxon Corporation
Kerr-McGee Corporation
Mobil Corporation
Murphy Oil Corporation
Occidental Petroleum Corp.
Pennzoil Company
Phillips Petroleum Corp.
Shell Oil Company
Standard Oil Coompany (Ohio)
Sun Company, Inc.
Texaco Inc.
Unocal Corporation

Source: Financial Trends of Leading U.S. Oil Companies, 1968-1983, API, Discussion Paper #017R, October 1987

Section V
Table 12a

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1977	1978	1979	1980	1981	1982	1983	1984	1985
TOTAL REVENUE	$243,603.8	$266,411.2	$352,301.5	$466,142.4	$518,894.8	$472,774.3	$430,184.9	$415,621.8	$405,033.1
DEDUCTIONS:									
Payroll and Benefits	15,086.2	17,137.3	20,581.6	25,282.4	28,329.5	30,003.1	29,737.2	29,241.4	28,733.5
Depreciation, Depletion and Amortization	8,750.9	10,507.3	12,259.2	14,324.7	17,339.9	19,807.4	21,520.2	23,351.7	24,804.2
Interest	2,891.2	3,516.7	3,796.2	4,012.7	5,431.7	5,466.5	5,380.0	7,213.9	8,916.5
Other Costs and Expenses	173,163.0	187,353.0	251,037.4	333,199.4	372,629.4	452,627.4	298,969.5	286,568.8	280,561.4
Total Taxes	32,186.8	35,226.2	42,876.5	61,463.2	69,011.5	57,125.9	54,028.0	51,406.3	48,270.0
TOTAL DEDUCTIONS	$232,078.1	$253,740.5	$330,551.4	$438,482.4	$492,742.0	$452,627.4	$409,634.9	$397,782.1	$391,285.6
NET INCOME	$ 11,507.2	$ 12,680.4	$ 21,759.1	$ 27,664.6	$ 26,152.8	$ 20,182.4	$ 20,662.6	$ 17,839.7	$ 13,988.5

Due to mergers, the number of companies used in the sample has decreased from 23 to 19. Based on this new sample, all numbers for previous years have been revised. The companies included in current sample are:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corporation
Ashland Oil, Inc.
Atlantic Richfield Co.
Chevron Corporation
Diamond Shamrock Corp.
Exxon Corporation
Kerr-McGee Corporation
Mobil Corporation
Murphy Oil Corporation
Occidental Petroleum Corp.
Pennzoil Company
Phillips Petroleum Corp.
Shell Oil Company
Standard Oil Company (Ohio)
Sun Company, Inc.
Texacp Inc.
Unocal Corporation

SOURCE: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017R, October 1988.

Section V
Table 12b

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1986	1987
TOTAL REVENUE	$304,588.6	$334,801.3
DEDUCTIONS:		
Payroll and Benefits	26,654.0	23,383.2
Depreciation, Depletion and Amortization	25,655.6	25,098.8
Interest	8,771.4	8,520.8
Other Costs and Expenses	198,966.4	228,398.8
Total Taxes	33,883.5	38,795.7
TOTAL DEDUCTIONS	293,930.9	324,197.3
NET INCOME	$10,613.6	$10,666.3

The companies included in this sample include:

- Amerada Hess Corporation
- American Petrofina, Inc.
- Amoco Corporation
- Ashland Oil, Inc.
- Atlantic Richfield Co.
- Chevron Corporation
- Diamond Shamrock Corp.
- Exxon Corporation
- Kerr-McGee Corporation
- Mobil Corporation
- Murphy Oil Corporation
- Occidental Petroleum Corp.
- Pennzoil Company
- Phillips Petroleum Corp.
- Shell Oil Company
- Standard Oil Co. (Ohio)
- Sun Company, Inc.
- Texaco Inc.
- Unocal Corporation

Source: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017, October 1988.

Section V
Table 13

CAPITAL EXPENDITURES OF LEADING U.S. OIL COMPANIES
(Billions of Dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
TOTAL												
U.S.	6.2	6.2	6.2	5.7	6.2	7.3	12.8	13.6	15.4	16.0	16.0	20.5
World	9.6	9.7	9.6	9.7	10.1	12.0	18.9	20.1	21.3	22.5	24.0	30.6
EXPLORATION & PRODUCTION												
U.S.	3.2	3.0	2.7	2.4	3.2	4.2	7.7	6.5	8.0	8.4	9.1	13.1
World	4.8	4.5	3.9	3.7	4.7	6.0	10.7	10.2	11.5	12.7	14.7	19.8
REFINING, MARKETING, TRANSPORTATION												
U.S.	1.9	2.2	2.6	2.6	2.2	2.0	3.2	4.7	4.2	3.0	2.9	3.5
World	3.4	4.0	4.6	5.0	4.3	4.8	6.0	7.1	6.1	4.9	4.7	5.9
TOTAL PETROLEUM												
U.S.	5.1	5.2	5.3	5.0	5.4	6.2	10.9	11.2	12.2	11.4	12.0	16.6
World	8.2	8.5	8.5	8.7	9.0	10.8	16.7	17.3	17.6	17.6	19.4	25.7
CHEMICALS												
U.S.	0.6	0.5	0.5	0.3	0.4	0.4	0.9	1.4	2.1	2.6	2.2	2.0
World	0.8	0.6	0.6	0.5	0.5	0.5	1.1	1.6	2.4	2.7	2.3	2.0
PETROLEUM & CHEMICALS												
U.S.	5.7	5.7	5.8	5.3	5.8	6.6	11.8	12.6	14.3	14.0	14.2	18.6
World	9.0	9.1	9.1	9.2	9.5	11.3	17.8	18.9	20.0	20.3	21.8	28.0
OTHER ENERGY												
U.S.	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.6	0.9	0.9	0.9
World	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.7	1.0	1.0	1.3
TOTAL ENERGY												
U.S.	5.9	5.9	6.0	5.5	6.0	6.8	12.3	13.2	14.9	14.9	15.1	19.5
World	9.2	9.3	9.3	9.4	9.7	11.5	18.4	19.6	20.7	21.3	22.8	29.3
OTHER												
U.S.	0.3	0.3	0.2	0.2	0.2	0.5	0.5	0.4	0.5	1.1	0.9	1.0
World	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.5	0.6	1.2	1.2	1.3

Source: Financial Trends of Leading U.S. Oil Companies 1968-1983, API, Discussion Paper #017, October 1984

CAPITAL EXPENDITURES OF LEADING U.S. OIL COMPANIES
(Billions of Dollars)

	1980	1981	1982	1983	1984	1985	1986	1987
TOTAL								
U.S.	27.6	39.4	35.4	28.4	30.3	28.1	17.6	17.0
World	40.7	53.5	49.8	40.2	41.0	39.4	25.4	25.8
EXPLORATION & PRODUCTION								
U.S.	17.5	26.3	22.5	18.9	21.7	19.8	10.5	9.6
World	26.1	35.0	32.1	26.7	28.8	27.3	15.5	15.7
REFINING, MARKETING, TRANSPORTATION								
U.S.	4.3	6.4	6.1	5.1	4.9	4.6	3.9	4.1
World	7.5	9.6	8.8	7.0	6.7	6.6	5.4	5.8
TOTAL PETROLEUM								
U.S.	21.8	32.7	28.6	24.0	26.6	24.4	14.4	13.7
World	33.6	44.6	40.9	33.7	35.5	33.9	20.9	21.5
CHEMICALS								
U.S.	2.5	2.6	2.0	1.1	1.0	1.3	1.2	1.2
World	2.5	2.6	2.0	1.7	1.4	1.5	1.5	1.6
PETROLEUM & CHEMICALS								
U.S.	24.3	35.3	30.6	25.1	27.6	25.7	15.6	14.9
World	36.5	48.1	43.9	35.4	36.9	35.4	22.4	23.1
OTHER ENERGY								
U.S.	1.4	1.6	2.3	1.0	1.0	0.6	0.5	0.5
World	1.9	2.4	3.0	2.1	1.6	1.6	1.2	0.9
TOTAL ENERGY								
U.S.	25.7	36.9	32.9	26.1	28.6	26.3	16.1	15.4
World	38.4	50.5	46.9	37.6	38.5	37.0	23.6	24.0
OTHER								
U.S.	1.9	2.5	2.5	2.3	1.7	1.8	1.5	1.6
World	2.3	3.0	2.9	2.7	2.5	2.4	1.8	1.8

Source: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017R, October 1988.

NET INCOME AS A PERCENT OF STOCKHOLDERS' EQUITY
OIL AND NON-OIL COMPANIES

Year	API-Sample Companies(1)	Non-Petroleum Manufacturing(2)
1968	12.5	14.7
1969	11.3	13.8
1970	10.9	10.0
1971	10.5	11.0
1972	9.8	12.8
1973	15.0	14.5
1974	18.6	13.2
1975	12.7	11.6
1976	13.8	14.0
1977	13.3	14.1
1978	13.5	14.8
1979	20.7	15.1
1980	22.5	12.2
1981	18.5	12.9
1982	13.1	9.7
1983	12.8	11.7
1984	11.4	14.1
1985	9.9	10.8
1986	7.3	11.4
Median	12.8	12.9

(1) Net income as a percent of average stockholders' equity
(2) Net income as a percent of average stockholders' equity. Calculations based on Standard & Poor's Compustat data base, All Industrial Aggregate excluding non-manufacturing (e.g., retail) and petroleum industry sectors. The median number of non-oil comopanies over the period was 747; the range was 694-820.

* Due to mergers, the number of coompanies used in the sample has decreased from 23 to 19. Based on this new sample, many numbers for previous years have been revised. The companies included in current sample are:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corp.
Ashland Oil, Inc.
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Exxon Corporation
Kerr-McGee Corp.
Mobil Corp.
Murphy Oil Corp.
Occidental Petroleum
Pennzoil Co.
Phillips Petroleum Corp.
Shell Oil Co.
Standard Oil (Ohio)
Sun Co., Inc.
Texaco Inc.
Unocal Corp.

Source: Financial Trends of Leading U.S. Oil Companies 1968-1986, API, Discussion Paper #017R, October 1987

WINDFALL PROFITS TAX
(Millions of Dollars)

Quarter Ending	Tax Before Adjustments	Total Adjustments(1)	Tax After Adjustments
Mar. 1980(2)	$ 788	$ --	$ 788
June 1980	2,842	- 21	2,821
Sept. 1980	3,413	- 88	3,325
Dec. 1980	3,918	-927	2,991
Mar. 1981	6,953	+242	7,195
June 1981	7,253	-107	7,146
Sept. 1981	6,344	-251	6,093
Dec. 1981	6,007	-497	5,510
Mar. 1982	5,222	-221	5,001
June 1982	4,283	-295	3,988
Sept. 1982	4,404	-445	3,959
Dec. 1982	4,440	-634	3,806
Mar. 1983	3,320	-193	3,127
June 1983	2,951	-203	2,748
Sept. 1983	2,822	-300	2,522
Dec. 1983	2,736	-465	2,271
Mar. 1984	2,622	-228	2,394
June 1984	2,468	-218	2,250
Sept. 1984	2,447	-200	2,247
Dec. 1984	2,236	-256	1,980
Mar. 1985	1,850	-117	1,733
June 1985	1,653	-132	1,521
Sept. 1985	1,442	-146	1,296
Dec. 1985	1,254	-256	1,980
TOTAL	$83,668	-$5,911	$77,757

(1) Adjustments were made because of errors by withholding agents during previous quarters or, more frequently, because of application of the net income limitation.
(2) One month only.

Source: U.S. Treasury Department, Internal Revenue Service, SOI Bulletin.

Section V
Table 16

U.S. MERCHANDISE TRADE VALUE
(Millions of Dollars)

	Exports (1)			Imports (2)			Trade Balance	
Year	Oil	Total	Oil as % of Total	Oil	Total	Oil as % of Total	Oil	Total
1974	792	98,092	0.8	26,073	102,559	25.4	-25,281	- 4,467
1975	907	107,652	0.8	26,664	98,503	27.1	-25,757	9,149
1976	998	115,223	0.9	34,614	123,477	28.0	-33,616	- 8,254
1977	1,276	121,232	1.1	44,071	150,390	29.3	-42,795	- 29,158
1978	1,561	143,681	1.1	42,188	174,757	24.1	-40,627	- 31,076
1979	1,914	184,860	1.1	59,805	209,458	28.6	-57,891	- 27,599
1980	2,833	220,626	1.3	78,637	244,871	32.1	-75,804	- 24,244
1981	3,696	233,677	1.6	76,659	260,982	29.4	-72,963	- 27,305
1982	5,947	212,193	2.8	60,458	243,952	24.8	-54,511	- 31,759
1983	4,557	200,486	2.3	53,217	258,048	20.6	-48,660	- 57,562
1984	4,470	217,865	2.1	56,924	325,726	17.5	-52,454	- 107,861
1985	4,707	213,133	2.2	50,475	345,276	14.6	-45,768	-132,143
1986	3,640	226,808	1.6	35,142	366,063	9.6	-31,502	-139,255
1987	2,837	252,866	1.1	42,285	405,901	10.4	-39,448	-153,035

(1) Exports are on an f.a.s. (free alongside ship) basis.
(2) Imports are on an f.a.s. basis through 1980. Beginning in 1981, they are on a customs value basis.

Source: U.S. Department of Commerce, Bureau of Census, FT 135 and FT 410, December issues.

OIL FINDING AND DEVELOPMENT COSTS
(Dollars per Barrel)

Year	U.S.	Foreign	Worldwide
1978	$ 6.64	$ 4.15	$ 5.42
1979	11.74	6.66	9.78
1980	10.66	5.66	8.42
1981	12.17	6.82	10.01
1982	11.57	7.83	10.22
1983	9.24	5.02	7.33
1984	6.61	4.09	5.67
1985	8.76	5.69	7.62
1986	6.96	5.71	6.50

Source: PETROLEUM OUTLOOK by John S. Herold, Inc., 5 Edgewood Avenue, Greenwich, Ct. 06830.

DOMESTIC OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS AND EXPLORATION AND DEVELOPMENT ACTIVITIES FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 396	$ 541	$ 410	$ 344	$ 398	$ 337	$ 135	$ 169
Amoco Corp.	2,247	2,869	2,327	2,472	2,827	3,407	1,830	1,815
Anadarko Petroleum	175	246	242	175	162	144	116	103
Atlantic Richfield	2,044	2,328	2,856	2,286	2,654	2,771	1,062	676
British Petroleum	NA	NA	2,637	2,263	2,184	2,057	1,366	894
Burlington Northern	106	207	417	79	215	303	96	95
Chevron Corp.	2,857	4,431	3,367	2,467	2,688	1,806	962	911
Consolidated Nat. Gas	123	163	178	218	272	332	166	222
DuPont (Conoco)	636	444	812	673	805	849	446	437
Enron	185	256	345	240	362	187	88	87
Enserch	90	151	141	148	236	254	142	148
Exxon	2,294	4,147	4,043	3,463	4,116	4,396	1,947	1,691
Kerr-McGee	198	270	325	214	186	257	86	75
Louisiana Land	447	681	479	275	276	236	105	87
Maxus Energy Corp.	350	524	601	156	188	255	107	113
Mesa	509	628	497	277	661	113	24	54
Mobil	2,572	2,431	3,265	2,267	1,343	1,413	1,054	789
Murphy	115	230	222	207	158	114	61	70
Occidental	810	982	219	379	505	416	274	198
Pennzoil	403	401	393	240	287	482	139	142
Phillips	821	1,619	1,062	1,768	942	607	309	299
Royal Dutch/Shell	2,074	2,647	2,405	2,067	3,034	3,206	2,014	1,685
Santa Fe So. Pacific	163	322	312	229	240	232	170	304
Sun	3,069	958	1,034	808	1,394	871	512	593
Tenneco	970	1,886	1,224	922	833	694	247	277
Texaco	2,520	3,186	3,247	2,773	2,037	1,797	1,140	1,056
USX	710	948	900	1,032	1,403	1,066	440	507
Union Pacific	482	615	518	357	381	384	211	216
Union Texas Petroleum	170	201	155	171	294	139	98	115
Unocal	828	1,003	873	606	835	810	483	436
TOTAL	$28,634	$35,315	$35,506	$29,576	$31,916	$29,935	$15,830	$14,264

Source: Salomon Brothers Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-1987, 1988 Edition.

DOMESTIC OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 140	$ 148	$ 78	$ 109	$ 100	$ 37	$ 5	$ 53
Amoco Corp.	249	298	203	781	718	928	339	356
Anadarko Petroleum	42	64	69	42	40	47	51	40
Atlantic Richfield	487	318	201	336	428	525	18	49
British Petroleum	NA	NA	833	492	496	224	31	0
Burlington Northern	31	41	67	14	67	86	25	26
Chevron Corp.	499	1,281	385	442	281	61	22	42
Consolidated	42	39	16	49	48	148	20	60
DuPont (Conoco)	119	118	135	194	222	140	47	121
Enron	45	65	66	48	196	61	37	24
Enserch	10	19	17	31	77	55	17	22
Exxon	478	1,258	539	808	1,311	445	106	690
Kerr-McGee	53	58	45	87	34	136	11	30
Louisiana Land	61	128	61	39	44	41	28	11
Maxus Energy Corp.	131	126	211	0	35	40	8	15
Mesa	224	156	89	66	533	24	11	32
Mobil	1,324	598	1,087	690	0	93	62	65
Murphy	22	104	69	89	37	13	21	22
Occidental	249	171	44	68	45	42	44	24
Pennzoil	129	95	96	85	117	308	38	37
Phillips	203	800	148	1,056	341	25	13	28
Royal Dutch/Shell	422	627	422	367	1,256	1,277	496	323
Santa Fe So. Pacific	13	61	62	82	41	47	59	188
Sun	2,482	178	129	216	592	153	81	159
Tenneco	370	965	225	365	218	210	45	61
Texaco	902	543	692	865	399	125	59	104
USX	169	243	121	316	618	161	37	133
Union Pacific	95	145	92	99	54	54	7	55
Union Texas Petroleum	30	18	14	37	140	39	20	29
Unocal	258	192	174	127	274	121	24	38
TOTAL	$ 9,279	$ 8,857	$ 6,390	$ 8,000	$ 8,762	$ 5,666	$ 1,782	$2,837

Source: Salomon Brothers Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

DOMESTIC OUTLAYS FOR PETROLEUM EXPLORATION FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 171	$ 268	$ 148	$ 110	$ 163	$ 197	$ 90	$ 75
Amoco Corp.	1,083	1,334	1,191	1,047	1,299	1,359	710	643
Anadarko Petroleum	64	92	81	62	59	41	27	29
Atlantic Richfield	622	853	886	849	996	785	341	232
British Petroleum	NA	NA	460	500	592	689	315	399
Burlington Northern	37	50	132	42	97	71	30	23
Chevron Corp.	1,217	1,496	1,371	1,007	997	685	351	294
Consolidated Nat. Gas	45	73	103	85	73	64	65	89
DuPont (Conoco)	135	138	288	251	269	284	177	145
Enron	53	82	140	106	62	35	17	19
Enserch	28	41	44	50	66	77	51	40
Exxon	760	954	932	780	1,032	1,108	491	333
Kerr-McGee	89	105	192	67	93	95	50	30
Louisiana Land	202	271	176	124	125	111	42	42
Maxus Energy Corp.	89	173	170	69	80	92	45	37
Mesa	120	177	134	102	67	45	7	5
Mobil	627	996	1,207	798	523	504	282	167
Murphy	67	91	109	95	81	66	28	35
Occidental	333	552	106	184	184	150	86	55
Pennzoil	69	115	95	59	66	58	19	29
Phillips	312	404	397	344	317	234	130	128
Royal Dutch/Shell	499	611	637	631	614	716	458	438
Santa Fe So. Pacific	65	120	72	47	63	58	29	35
Sun	159	203	327	173	255	236	166	156
Tenneco	159	312	309	177	185	116	67	60
Texaco	610	1,062	1,240	871	851	603	339	264
USX	204	304	347	297	291	263	93	122
Union Pacific	148	147	157	129	166	130	78	74
Union Texas Petroleum	61	84	76	70	104	56	44	37
Unocal	206	281	268	198	223	231	127	130
TOTAL	$8,234	$11,389	$11,795	$9,324	$9,993	$9,159	$4,755	$4,165

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 21

DOMESTIC OUTLAYS FOR PETROLEUM DEVELOPMENT FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 85	$ 125	$ 184	$ 125	$ 135	$ 103	$ 40	$ 41
Amoco Corp.	915	1,237	933	644	810	1,120	781	816
Anadarko Petroleum	69	90	92	71	63	56	38	34
Atlantic Richfield	935	1,157	1,769	1,101	1,230	1,461	703	395
British Petroleum	NA	NA	1,344	1,271	1,096	1,144	1,020	495
Burlington Northern	38	116	218	23	51	146	41	46
Chevron Corp.	1,141	1,654	1,611	1,018	1,410	1,060	589	575
Consolidated Nat. Gas	36	51	59	84	151	120	81	73
DuPont (Conoco)	382	188	389	228	314	425	222	171
Enron	87	109	139	86	104	91	34	44
Enserch	52	91	80	67	93	122	74	86
Exxon	1,056	1,935	2,572	1,875	1,773	2,843	1,350	668
Kerr-McGee	56	107	88	60	59	26	25	15
Louisiana Land	184	282	242	112	107	84	35	34
Maxus Energy Corp.	130	225	220	87	73	123	54	61
Mesa	165	295	274	109	61	44	6	17
Mobil	621	837	971	779	820	816	710	557
Murphy	26	35	44	23	40	35	12	13
Occidental	228	259	69	127	276	224	144	119
Pennzoil	205	191	202	96	104	116	82	76
Phillips	306	415	517	368	284	348	166	143
Royal Dutch/Shell	1,153	1,409	1,346	1,069	1,164	1,213	1,060	924
Santa Fe So. Pacific	85	141	178	100	136	127	82	81
Sun	428	577	578	419	547	482	265	278
Tenneco	441	609	690	380	430	368	135	156
Texaco	1,008	1,581	1,315	1,037	787	1,069	742	688
USX	337	401	432	419	494	642	310	252
Union Pacific	239	323	269	129	161	200	126	87
Union Texas Petroleum	79	99	65	64	50	44	34	49
Unocal	364	530	431	281	338	458	332	268
TOTAL	$10,851	$15,069	$17,321	$12,252	$13,161	$15,110	$9,293	$7,262

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

WORLDWIDE OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS AND EXPLORATION AND DEVELOPMENT ACTIVITIES FOR 30 LARGE ENERGY COMPANIES

(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 769	$ 991	$ 812	$ 645	$ 675	$ 705	$ 266	$ 358
Amoco Corp.	3,471	4,031	3,546	3,482	4,056	4,865	2,723	2,638
Anadarko Petroleum	183	251	244	177	168	154	120	109
Atlantic Richfield	2,256	2,525	3,243	2,812	3,119	3,154	1,475	929
British Petroleum	NA	NA	4,395	3,496	3,351	3,498	2,865	2,417
Burlington Northern	106	207	417	79	215	303	96	95
Chevron Corp.	4,105	5,938	4,955	3,882	3,783	2,642	1,624	1,608
Consolidated Nat. Gas	123	163	178	218	272	332	166	222
DuPont (Conoco)	1,321	629	1,341	1,175	1,303	1,325	954	1,113
Enron	248	354	435	276	464	247	102	101
Enserch	96	154	164	167	246	269	147	151
Exxon	4,595	6,824	6,940	5,648	6,536	6,924	3,792	4,614
Kerr-McGee	342	459	466	312	279	360	149	154
Louisiana Land	511	803	602	369	354	321	140	137
Maxus Energy Co.	513	818	1,070	278	436	439	271	194
Mesa	516	636	509	277	661	113	24	54
Mobil	3,793	3,777	4,835	3,550	2,232	2,261	1,800	1,497
Murphy	272	303	325	318	275	230	104	125
Occidental	1,350	1,735	691	737	800	888	583	384
Pennzoil	420	424	419	262	330	523	159	168
Phillips	1,325	2,251	1,684	2,309	1,258	893	485	497
Royal Dutch/Shell	4,895	5,755	5,447	4,485	5,362	6,324	4,242	3,712
Santa Fe So. Pacific	163	322	312	229	240	232	170	304
Sun	3,231	1,063	1,166	925	1,648	1,285	771	680
Tenneco	1,025	2,208	1,367	1,027	925	884	363	394
Texaco	3,640	4,089	4,194	3,570	2,836	2,391	1,703	1,544
USX	1,039	1,541	1,372	1,500	1,822	1,588	791	805
Union Pacific	482	615	518	357	381	384	211	216
Union Texas Petroleum	381	417	398	366	486	368	206	170
Unocal	1,217	1,358	1,411	1,163	1,309	1,245	708	708
TOTAL	$42,338	$50,651	$53,456	$44,091	$45,822	$45,147	$27,210	$26,098

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 23

DOMESTIC OIL AND GAS FINDING COSTS EXCLUDING PROPERTY ACQUISITION COSTS(1)
FOR 30 LARGE ENERGY COMPANIES
(Dollars Per Barrel of Oil Equivalent)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 7.35	$5.75	$19.53	$28.78	$11.25	$13.85	$6.05	$3.80
Amoco Corp.	7.17	6.77	7.62	4.52	6.30	9.11	NM	3.77
Anadarko Petroleum	8.67	23.74	6.29	7.06	5.59	3.40	1.67	4.73
Atlantic Richfield	5.44	8.60	5.46	7.28	4.21	NM	3.15	1.38
British Petroleum	NA	NA	NA	9.37	3.62	49.76	NM	1.88
Burlington Northern	4.05	8.16	21.88	0.19	6.94	8.19	32.77	5.38
Chevron Corp.	8.69	13.56	14.03	7.49	4.56	8.07	13.09	5.16
Consolidated Nat. Gas	5.59	7.15	14.29	2.82	7.68	4.72	4.66	4.93
DuPont (Conoco)	4.97	7.41	6.02	6.22	7.05	9.62	39.90	3.50
Enron	9.77	36.97	18.20	12.39	6.51	2.92	1.74	6.30
Enserch	2.77	4.63	7.22	5.48	2.42	3.47	3.23	4.64
Exxon	6.46	5.96	9.24	4.82	6.15	9.99	6.16	NM
Kerr-McGee	5.37	21.93	21.54	14.11	91.20	23.42	NM	6.28
Louisiana Land	18.53	13.71	10.90	6.10	11.23	7.36	4.44	11.69
Maxus Energy Corp.	7.38	10.47	29.62	17.02	7.46	10.93	3.76	6.32
Mesa	7.18	12.10	3.81	10.55	5.82	1.51	NM	1.01
Mobil	6.06	5.95	9.56	7.30	6.79	9.55	4.34	3.45
Murphy	9.15	12.60	16.39	6.00	10.68	13.47	18.46	4.17
Occidental	22.59	19.86	75.00	13.23	5.49	6.43	2.41	2.59
Pennzoil	6.55	7.65	3.96	7.38	9.36	6.69	27.55	7.59
Phillips	7.99	7.38	7.11	7.75	4.47	14.92	14.32	3.27
Royal Dutch/Shell	4.41	8.79	6.58	6.05	6.15	6.40	6.84	4.29
Santa Fe So. Pacific	6.67	14.37	12.30	7.23	9.87	8.47	6.59	6.00
Sun	7.28	9.47	11.01	11.31	8.25	6.39	13.40	9.50
Tenneco	6.03	8.49	9.87	5.79	5.36	3.19	7.44	4.50
Texaco	NM	17.68	20.91	18.03	68.73	12.23	9.41	4.18
USX	7.71	10.96	11.05	9.40	7.52	5.20	4.62	6.23
Union Pacific	4.61	5.34	8.81	6.62	7.55	7.95	NM	NM
Union Texas Petroleum	16.15	12.34	35.25	12.56	10.87	5.13	8.67	5.49
Unocal	6.49	10.86	9.73	5.04	6.79	7.57	8.01	4.89
TOTAL	$ 7.31	$ 8.85	$11.06	$6.31	$5.96	$15.63	$14.06	$6.12

NM = Not meaningful

$$\text{Finding Costs} = \frac{\text{Outlays for Petroleum Exploration and Development}}{\text{Reserves Additions from Extensions \& Discoveries, Improved Recovery and Revisions}}$$

(1) This table has been changed to reflect oil and gas finding costs excluding property acquisition costs, which gives a more accurate assessment of true finding costs.

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

WORLDWIDE OIL AND GAS FINDING COSTS EXCLUDING PROPERTY ACQUISITION COSTS(1)
FOR 30 LARGE ENERGY COMPANIES
(Dollars Per Barrel of Oil Equivalent)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$13.48	$ 8.50	$34.86	$16.85	$18.39	$10.48	$3.15	$2.75
Amoco Corp.	5.65	5.20	7.80	5.72	7.23	6.96	34.13	3.97
Anadarko Petroleum	8.69	22.32	6.18	7.04	5.11	3.43	1.71	4.29
Atlantic Richfield	5.36	8.61	4.99	6.64	4.78	NM	3.76	1.79
British Petroleum	NA	NA	NM	6.26	2.66	6.22	NM	2.60
Burlington Northern	4.05	8.16	21.88	0.19	6.94	8.19	32.77	5.38
Chevron Corp.	7.83	10.70	8.96	5.64	5.58	5.76	12.06	4.92
Consolidated Nat. Gas	5.59	7.15	14.29	2.82	7.68	4.72	4.66	4.93
DuPont (Conoco)	13.44	8.69	8.66	5.60	5.03	6.81	NM	3.79
Enron	7.25	14.92	13.19	7.09	8.35	NM	2.07	6.17
Enserch	2.88	4.58	7.93	6.04	2.57	3.67	3.45	4.82
Exxon	2.97	10.22	5.79	3.97	5.53	6.24	6.32	NM
Kerr-McGee	6.00	38.10	30.80	7.67	NM	16.69	NM	16.17
Louisiana Land	14.97	16.37	12.34	7.53	7.42	12.78	6.05	7.00
Maxus Energy Corp.	6.97	10.18	21.22	7.69	5.71	11.08	4.82	4.61
Mesa	7.36	11.95	3.91	10.13	5.30	1.53	NM	1.01
Mobil	4.10	2.70	18.98	4.87	6.24	10.49	3.31	3.76
Murphy	NM	8.89	7.93	7.93	9.82	11.94	NM	3.61
Occidental	17.77	18.94	12.50	7.19	2.67	3.90	2.22	2.07
Pennzoil	6.52	7.81	4.22	7.98	11.14	7.20	22.65	8.43
Phillips	NM	14.07	8.83	6.14	5.49	27.49	2.20	2.44
Royal Dutch/Shell	8.19	7.87	11.24	4.30	3.39	8.63	4.92	2.38
Santa Fe So. Pacific	6.67	14.37	12.30	7.23	9.87	8.47	6.59	6.00
Sun	11.20	9.83	10.94	6.80	7.29	7.24	15.94	9.00
Tenneco	6.55	8.03	10.22	6.18	5.88	3.64	6.84	5.43
Texaco	NM	8.28	22.79	12.35	21.36	8.63	6.56	3.86
USX	4.81	14.89	16.12	5.44	9.60	6.70	7.86	5.90
Union Pacific	4.61	5.34	8.81	6.62	7.55	7.95	NM	NM
Union Texas Petroleum	8.09	12.70	NM	6.35	9.27	9.23	4.81	4.01
Unocal	9.44	7.73	34.79	7.85	7.79	6.03	5.22	3.62
TOTAL	$6.70	$ 7.59	$10.85	$5.35	$5.29	$9.49	$8.92	$4.21

NA = Not Available
NM = Not Meaningful

$$\text{Finding Costs} = \frac{\text{Outlays for Petroleum Exploration and Development}}{\text{Reserves Additions from Extensions \& Discoveries, Improved Recovery and Revisions}}$$

(1) This table has been changed to reflect oil and gas finding costs excluding property acquisition costs, which gives a more accurate assessment of true finding costs.

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

SECTION VI. PRICES

Table 1. Average Annual Wellhead Price of United States Crude Oil, Current and Constant 1967 Dollars

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Section VI
Table 1

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES CRUDE OIL
CURRENT AND CONSTANT 1967 DOLLARS
(U.S. dollars per U.S. barrel of 42 gallons)

Year	Price in Current Dollars	Producer Price Index All Commodities(1) (1967 = 100)	Price in 1967 Constant Dollars
1947	$1.93	76.5	$2.52
1948	2.60	82.8	3.14
1949	2.54	78.7	3.23
1950	2.51	81.8	3.07
1951	2.53	91.1	2.78
1952	2.53	88.6	2.86
1953	2.68	87.4	3.07
1954	2.78	87.6	3.17
1955	2.77	87.8	3.15
1956	2.79	90.7	3.08
1957	3.09	93.3	3.31
1958	3.01	94.6	3.18
1959	2.90	94.8	3.06
1960	2.88	94.9	3.03
1961	2.89	94.5	3.06
1962	2.90	94.8	3.06
1963	2.89	94.5	3.06
1964	2.88	94.7	3.04
1965	2.86	96.6	2.96
1966	2.88	99.8	2.89
1967	2.92	100.0	2.92
1968	2.94	102.5	2.87
1969	3.09	106.5	2.90
1970	3.18	110.4	2.88
1971	3.39	113.9	2.98
1972	3.39	119.1	2.85
1973	3.89	134.7	2.89
1974	6.74	160.1	4.21
1975	7.56	174.9	4.32
1976	8.14	182.9	4.45
1977	8.57	194.2	4.41
1978	8.96	209.3	4.28
1979	12.51	235.6	5.31
1980	21.59	268.7	8.03
1981	31.77	293.4	10.83
1982	28.52	299.3	9.53
1983	26.19	303.1	8.64
1984	25.88	310.3	8.34

(1) For 1976 and prior years figures are for Wholesale Price Index.

Source: Current Dollar Price, U.S. Energy Information Administration
Producer Price Index, U.S. Bureau of Labor Statistics
Constant Dollar Price computed by American Petroleum Institute

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES CRUDE OIL
CURRENT AND CONSTANT 1967 DOLLARS
(U.S. dollars per U.S. barrel of 42 gallons)

Year	Price in Current Dollars	Producer Price Index All Commodities(1) (1967 = 100)	Price in 1967 Constant Dollars
1985	$24.09	308.8	$ 7.80
1986	12.51	300.9	4.16
1987	15.41	307.7	5.01

Source: Current Dollars Price--U.S. Energy Information Administration
Producer Price Index--U.S. Bureau of Labor Statistics
Constant Dollar Price computed by American Petroleum Institute

Section VI
Table 2

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES NATURAL GAS
CURRENT AND CONSTANT 1967 CENTS
(U.S. cents per thousand cubic feet)

Year	Price in Current Cents	Producer Price Index(2) All Commodities (1967 = 100)	Price in 1967 Constant Cents
1947	6.0	76.5	7.8
1948	6.5	82.8	7.9
1949	6.3	78.7	8.0
1950	6.5	81.8	7.9
1951	7.3	91.1	8.0
1952	7.8	88.6	8.8
1953	9.2	87.4	10.5
1954	10.1	87.6	11.5
1955	10.4	87.8	11.8
1956	10.8	90.7	11.9
1957	11.3	93.3	12.1
1958	11.9	94.6	12.6
1959	12.9	94.8	13.6
1960	14.0	94.9	14.8
1961	15.1	94.5	16.0
1962	15.5	94.8	16.4
1963	15.8	94.5	16.7
1964	15.4(1)	94.7	16.3
1965	15.6	96.6	16.1
1966	15.7	99.8	15.7
1967	16.0	100.0	16.0
1968	16.4	102.5	16.0
1969	16.7	106.5	15.7
1970	17.1	110.4	15.5
1971	18.2	113.9	16.0
1972	18.6	119.1	15.6
1973	21.6	134.7	16.0
1974	30.4	160.1	19.0
1975	44.5	174.9	25.4
1976	58.0	182.9	31.7
1977	79.0	194.2	40.7
1978	90.5	209.3	43.2
1979	117.8	235.6	50.0
1980	159.0	268.7	59.2
1981	198.0	293.4	67.5
1982	246.0	299.3	82.2
1983	259.0	303.1	85.5
1984	266.0	310.3	85.7

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(1) For 1964 and prior years, volumes were reported on the basis of 14.65 p.s.i.
For 1965 and subsequent years, volumes were reported on the basis of 14.73 p.s.i.
(2) For 1976 and prior years, figures are for Wholesale Price Index.

Source: Current Price, U.S. Energy Information Administration.
Producer Price Index, U.S. Bureau of Labor Statistics
Constant Price computed by the American Petroleum Institute

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES NATURAL GAS
CURRENT AND CONSTANT 1967 DOLLARS
(U.S. cents per thousand cubic feet)

Year	Price in Current Cents	Producer Price Index All Commodities (1967 = 100)	Price in 1967 Constant Cents
1985	251.0	308.8	81.3
1986	187.0	300.9	62.2

Source: Current Price--U.S. Energy Information Administration
Producer Price Index--U.S. Bureau of Labor Statistics
Constant Price computed by the American Petroleum Institute

Section VI
Table 3

REFINER ACQUISITION COST OF CRUDE OIL
(Dollars per Barrel)

Year	Domestic	Imported	Composite
1968(1)	3.21	2.90	3.17
1969	3.37	2.80	3.29
1970	3.46	2.96	3.40
1971	3.68	3.17	3.60
1972	3.67	3.22	3.58
1973	4.17	4.08	4.15
1974	7.18	12.52	9.07
1975	8.39	13.93	10.38
1976	8.84	13.48	10.89
1977	9.55	14.53	11.96
1978	10.61	14.57	12.46
1979	14.27	21.67	17.72
1980	24.23	33.89	28.07
1981	34.33	37.05	35.24
1982	31.22	33.55	31.87
1983	28.87	29.30	28.99
1984	28.53	28.88	28.63
1985	26.65	27.03	26.76
Jan.	26.89	26.51	27.02
Feb.	26.39	27.05	26.53
Mar.	26.61	27.23	26.77
Apr.	26.79	27.61	27.04
May	26.90	27.62	27.11
Jun.	26.50	27.27	26.69
Jul.	26.67	26.46	26.61
Aug.	26.45	26.62	26.50
Sep.	26.39	26.59	26.44
Oct.	26.59	26.80	26.65
Nov.	26.72	27.12	26.85
Dec.	26.91	26.60	26.82

(1) Not available prior to 1968.

Source: U.S. Department of Energy--Annual Energy Review and Monthly Energy Review.

Section VI
Table 3a

REFINER ACQUISITION COST OF CRUDE OIL
(Dollars per Barrel)

Year	Domestic	Imported	Composite
1986	14.83	13.98	14.55
Jan.	25.94	24.92	25.64
Feb.	20.42	18.02	19.81
Mar.	15.11	14.21	14.87
Apr.	13.06	13.14	13.08
May	12.99	13.17	13.05
Jun	13.11	12.25	12.82
Jul.	11.82	10.91	11.51
Aug.	11.95	11.87	11.92
Sep.	13.27	12.85	13.11
Oct.	13.20	12.78	13.05
Nov.	13.21	13.46	13.30
Dec.	13.67	14.16	13.85
1987	17.77	18.16	17.91
Jan.	16.02	16.43	16.17
Feb.	16.76	16.96	16.82
Mar.	16.93	17.24	17.03
Apr.	17.21	17.88	17.43
May	17.64	18.24	17.84
Jun	18.34	18.71	18.47
Jul	19.05	19.25	19.14
Aug.	19.41	19.30	19.36
Sep.	18.58	18.55	18.57
Oct.	18.37	18.57	18.45
Nov.	17.95	18.16	18.03
Dec.	17.03	17.45	17.19
1988			
Jan.	15.82	16.10	15.92
Feb.	15.61	15.61	15.72
Mar.	14.92	14.82	14.88
Apr.	15.88	15.69	15.81
May	16.35	16.02	16.22
Jun	15.83	15.52	15.71
Jul	14.65	14.80	14.71
Aug.(p)	14.36	14.25	14.32

(p) Preliminary.
(1) Not available prior to 1968.

Source: U.S. Department of Energy--Annual Energy Review and Monthly Energy Review.

TREND OF WHOLESALE PRICES OF COMMODITIES UTILIZED IN THE PRODUCTION OF PETROLEUM

(1967 = 100)

Year	Oil Field Machinery and Tools	Line Pipe Carbon	Oil Well Casing Carbon	Oil Well Casing Alloy
1947	54.9	N.A.	N.A.	N.A.
1948	59.5	N.A.	N.A.	N.A.
1949	62.9	N.A.	N.A.	N.A.
1950	64.3	N.A	N.A.	N.A.
1951	70.8	N.A	N.A.	N.A.
1952	70.9	N.A.	N.A.	N.A.
1953	73.9	N.A.	N.A.	N.A.
1954	76.5	76.0	69.2	66.0
1955	79.7	80.6	72.8	70.4
1956	84.7	91.9	77.7	77.7
1957	90.5	102.2	86.2	87.9
1958	91.0	105.5	89.8	91.6
1959	91.1	105.1	91.6	93.4
1960	91.2	104.1	91.6	93.4
1961	92.5	102.9	89.5	91.3
1962	93.8	103.5	88.0	89.7
1963	93.3	105.9	88.8	90.6
1964	94.8	103.6	91.9	93.4
1965	95.2	97.9	96.2	97.9
1966	96.5	97.9	96.2	97.9
1967	100.0	100.0	100.0	100.0
1968	106.4	104.0	101.5	102.5
1969	112.7	109.2	104.5	106.4
1970	118.7	113.2	109.1	111.2
1971	122.6	124.7	120.7	122.7
1972	127.3	133.7	128.4	131.1
1973	133.2	139.1	133.2	136.3
1974	157.8	189.8	170.7	181.3

N.A. Not available

Source: U.S. Bureau of Labor Statistics, Wholesale Price Index

Section VI
Table 4a

TREND OF WHOLESALE PRICES OF COMMODITIES UTILIZED IN THE PRODUCTION OF PETROLEUM
(1967 = 100)

Year	Oil Field Machinery and Tools	Line Pipe Carbon	Oil Well Casing Carbon	Oil Well Casing Alloy
1975	196.3	226.9	211.5	220.1
1976	217.7	234.6	223.1	239.2
1977	236.6	260.5	244.3	270.0
1978	261.6	296.6	271.6	299.8
1979	289.6	303.4	285.2	316.9
1980	335.5	336.2	326.9	366.9
1981	401.0	394.0	407.6	501.7
1982	439.6	416.8	451.9	584.0
1983	427.9	406.3	406.1	455.7
1984	425.0	405.6	386.4	416.8
1985	426.3	405.1	381.4	386.6
1986	415.5	402.7	355.2	386.0
1987	410.0	405.5	370.0	359.7(p)

(p) Based on partial data.

Source: U.S. Bureau of Labor Statistics, Producer Price Index

Section VI
Table 5

TREND OF REGULAR GRADE GASOLINE PRICES VS. PRICES OF OTHER CONSUMER GOODS AND SERVICES

	RETAIL PRICE OF REGULAR GRADE GASOLINE			PRICE INDEXES OF SOME OTHER CONSUMER ITEMS				
Year	Service Station Price Excl. Taxes	State and Federal Taxes	Service Station Price Incl. Taxes	All Items	Food	Rent	Apparel and Upkeep	Reading and Recreation
		Cents per Gallon				Index: 1967 = 100		
1947	16.93	6.18	23.11	66.9	70.6	61.1	78.2	68.7
1948	19.54	6.34	25.88	72.1	76.6	65.1	83.3	72.2
1949	20.27	6.52	26.79	71.4	73.5	68.0	80.1	74.9
1950	20.08	6.68	26.76	72.1	74.5	70.4	79.0	74.4
1951	20.31	6.84	27.15	77.8	82.8	73.2	86.1	76.6
1952	20.04	7.32	27.36	79.5	84.3	76.2	85.3	76.9
1953	21.28	7.41	28.69	80.1	83.0	80.3	84.6	77.7
1954	21.56	7.48	29.04	80.5	82.8	83.2	84.5	76.9
1955	21.42	7.65	29.07	80.2	81.6	84.3	84.1	76.7
1956	21.57	8.36	29.93	81.4	82.2	85.9	85.8	77.8
1957	22.11	8.85	30.96	84.3	84.9	87.5	87.3	80.7
1958	21.47	8.91	30.38	86.6	88.5	89.1	87.5	83.9
1959	21.18	9.31	30.49	87.3	87.1	90.4	88.2	85.3
1960	20.99	10.14	31.13	88.7	88.0	91.7	89.6	87.3
1961	20.53	10.23	30.76	89.6	89.1	92.9	90.4	89.3
1962	20.36	10.28	30.64	90.6	89.9	94.0	90.9	91.3
1963	20.11	10.31	30.42	91.7	91.2	95.0	91.9	92.8
1964	19.98	10.37	30.35	92.9	92.4	95.9	92.7	95.0
1965	20.70	10.45	31.15	94.5	94.4	96.9	93.7	95.9
1966	21.57	10.51	32.08	97.2	99.1	98.2	96.1	97.5
1967	22.55	10.61	33.16	100.0	100.0	100.0	100.0	100.0
1968	22.93	10.78	33.71	104.2	103.6	102.4	105.4	104.7
1969	23.85	10.99	34.84	109.8	108.9	105.7	111.5	108.7
1970	24.55	11.14	35.69	116.3	114.9	110.1	116.1	113.4
1971	25.20	11.23	36.43	121.3	118.4	115.2	119.8	119.3
1972	24.46	11.67	36.13	125.3	123.5	119.2	122.3	122.8
1973	26.88	11.94	38.82	133.1	141.4	124.3	126.8	125.9
1974	40.41	12.00	52.41	147.7	161.7	130.6	136.2	133.8

Sources: Retail Price of Regular Grade Gasoline, Platt's Oil Price Handbook and Oilmanac.
Price Indexes, U.S. Department of Labor, Bureau of Labor Statistics

Section VI
Table 5a

TREND OF REGULAR GRADE GASOLINE PRICES VS. PRICES OF OTHER CONSUMER GOODS AND SERVICES

	RETAIL PRICE OF REGULAR LEADED GASOLINE			PRICE INDEXES OF SOME OTHER CONSUMER ITEMS				
Year	Service Statio Price Excl. Taxes	State and Federal Taxes	Service Station Price Incl. Taxes	All Items	Food	Rent	Apparel and Upkeep	Enter- tainment(2)
		Cents per Gallon				Index: 1967 = 100		
1975	45.44	11.77	57.22	161.2	175.4	137.3	142.3	144.4
1976	47.44	12.03	59.47	170.5	180.8	144.7	147.6	151.2
1977	50.70	12.37	63.07	181.5	192.2	153.3	154.2	157.9
1978	53.09	12.62	65.71	195.4(1)	211.4	164.0	159.6	176.6
1979	74.33	13.46	87.79	217.4	234.5	176.0	166.6	188.5
1980	104.73	14.37	119.10	246.8	254.6	191.6	178.4	205.3
1981	N.A.	N.A.	131.10	272.3	274.6	208.2	186.9	221.4
1982	N.A.	N.A.	122.20	289.1	285.7	224.0	191.8	235.8
1983	95.36	20.34	115.70	298.4	291.7	236.9	196.5	246.0
1984	91.46	20.84	112.90	311.1	302.9	249.3	200.2	255.1
1985	89.64	21.86	111.50	322.2	309.8	264.6	206.0	265.0
1986	63.63	22.07	85.70	328.4	319.7	280.0	207.8	274.1
1987	66.33	23.37	89.70	340.5	332.9	291.4	217.4	NA

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(1) Beginning in July, 1978, the CPI was given in two forms, CPI-U & CPI-W. The index used above is the CPI-U.
(2) Represented "Reading and Recreation" prior to July 1978.
N.A. Not available

Source: Retail price of regular grade gasoline at full-service stations, Platt's Oil Price Handbook and Oilmanac
1979-80 retail price of regular grade gasoline at full-service stations, Platt's/Lundberg Summary from Platt's Oil Price Handbook
1981-1987 -- retail price of regular grade gasoline, Bureau of Labor Statistics
Price indexes, U.S. Department of Labor, Bureau of Labor Statistics

Section VI
Table 6

U.S. ANNUAL AVERAGE RETAIL PRICE OF #2 HOME HEATING OIL

Year	Cost per Gallon(1) (current cents)	Consumer Price Index (1967 = 100)	Cost Per Gallon (1967 constant cents)
1956(2)	15.21	81.4	18.69
1957	15.98	84.3	18.96
1958	15.07	86.6	17.40
1959	15.29	87.3	17.51
1960	15.02	88.7	16.93
1961	15.62	89.6	17.43
1962	15.62	90.6	17.24
1963	15.97	91.7	17.42
1964	16.06	92.9	17.29
1965	16.04	94.5	16.97
1966	16.43	97.2	16.90
1967	16.91	100.0	16.91
1968	17.44	104.2	16.74
1969	17.82	109.8	16.23
1970	18.48	116.3	15.89
1971	19.63	121.3	16.18
1972	19.72	125.3	15.74
1973	22.75	133.1	17.09
1974	36.01	147.7	24.38
1975	38.98	161.2	24.18
1976	41.80	170.5	24.52
1977	47.37	181.5	26.10
1978	50.80(e)	195.4	26.00
1979	72.80	217.4	33.49
1980	100.97	246.8	40.91
1981	124.66	272.4	45.76
1982	120.86	289.1	41.81
1983	110.12	298.4	36.90
1984	111.97	311.1	35.99
1985	107.55	322.2	33.38
1986	83.45	328.4	25.41
1987	85.15	340.4	25.01

(e) Estimate.
(1) Includes all applicable taxes.
(2) Data prior to 1956 is not available on a comparable basis.

Source: U.S. Department of Labor, Bureau of Labor Statistics
BLS Monthly prices averaged by API to derive annual average price

TOTAL DOLLAR VALUE OF U.S. CRUDE OIL AND NATURAL GAS AT THE WELLHEAD

	VALUE (Thousand dollars)		PRODUCTION (Trillion BTU)		PRICE AT WELLHEAD (Cents per million BTU)		PRICE AT WELLHEAD (1967 constant cents per million BTU)	
Year	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas
1947	$3,577,890	$274,709	10,771	5,012	33.2	5.5	43.4	7.2
1948	5,245,080	333,173	11,717	5,615	44.8	5.9	54.1	7.1
1949	4,674,770	344,034	10,683	5,911	43.8	5.8	55.7	7.4
1950	4,963,380	408,521	11,449	6,841	43.4	6.0	53.1	7.3
1951	5,690,410	542,964	13,037	8,106	43.6	6.7	47.9	7.4
1952	5,785,230	623,649	13,282	8,705	43.6	7.2	49.2	8.1
1953	6,327,100	774,966	13,671	9,116	46.3	8.5	53.0	9.7
1954	6,424,930	882,501	13,427	9,488	47.9	9.3	54.7	10.6
1955	6,870,380	978,357	14,445	10,532	47.6	9.3	54.2	10.6
1956	7,296,760	1,083,812	15,344	11,252	47.6	9.6	52.5	10.6
1957	8,079,259	1,201,759	15,346	11,885	52.6	10.1	56.4	10.8
1958	7,379,973	1,317,521	14,154	12,244	52.1	10.8	55.1	11.4
1959	7,473,336	1,556,800	14,662	13,361	51.0	11.7	53.8	12.3
1960	7,420,181	1,789,970	14,664	14,135	50.6	12.7	53.3	13.4
1961	7,565,582	1,996,241	15,185	14,691	49.8	13.6	52.7	14.4
1962	7,774,051	2,145,301	15,495	15,365	50.2	14.0	53.0	14.8
1963	7,965,743	2,328,030	15,741	16,271	50.6	14.3	53.5	15.1
1964	8,017,078	2,387,689	15,691	17,138	51.1	13.9	54.0	14.7
1965	8,158,298	2,494,542	15,930	17,652	51.2	14.1	53.0	14.6
1966	8,726,423	2,702,759	16,925	18,984	51.6	14.2	51.7	14.2
1967	9,375,727	2,898,741	18,100	20,087	51.8	14.4	51.8	14.4
1968	9,794,826	3,168,688	18,593	21,548	52.7	14.7	51.4	14.3
1969	10,426,680	3,455,615	18,886	22,838	55.2	15.1	51.8	14.2
1970	11,173,726	3,745,680	20,401	24,154	54.8	15.5	49.6	14.0
1971	11,692,998	4,085,482	20,033	24,805	58.4	16.5	51.3	14.5
1972	11,706,510	4,180,462	20,041	24,792	58.4	16.9	49.0	14.2
1973	13,057,905	4,894,072	19,493	24,746	67.0	19.8	49.7	14.7
1974	21,580,549	6,573,402	18,575	23,689	116.2	27.7	72.6	17.3

Sources: Dollar value and production, U.S. Bureau of Mines
U.S. Bureau of Labor Statistics, Wholesale Price Index
Price at wellhead computed by the American Petroleum Institute

TOTAL DOLLAR VALUE OF U.S. CRUDE OIL AND NATURAL GAS AT THE WELLHEAD

	VALUE (Thousand dollars)		PRODUCTION (Trillion BTU)		PRICE AT WELLHEAD (Cents per million BTU)		PRICE AT WELLHEAD (1967 constant cents per million BTU)	
Year	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas
1975	$23,116,059	$ 8,945,062	17,729	20,531	130.4	43.6	74.5	24.9
1976	24,229,540	11,571,776	17,262	20,371	140.4	56.8	76.7	31.0
1977	25,790,722	15,824,954	17,454	20,025	147.8	77.4	76.1	39.9
1978	28,477,824	18,084,914	18,420	20,393	154.4	88.7	73.8	42.4
1979	39,051,332	24,113,634	18,064	20,901	216.7	115.4	92.0	49.0
1980	65,722,016	32,043,704	18,249	20,482	360.2	156.4	134.1	58.2
1981	99,396,384(1)	39,551,253	18,147	20,255	547.8	190.3	186.7	64.9
1982	90,029,512(1)	45,496,765	18,309	18,797	491.7	242.0	164.3	80.9
1983	82,745,734(1)	43,614,369	18,325	18,757	451.5	288.8	149.0	95.3
1984	84,102,132(1)	48,404,611	18,848	20,217	446.2	295.0	143.8	95.1
1985	78,851,236(1)	43,182,598	18,992	19,124	415.2	279.1	134.5	90.4
1986	39,634,833(1)	32,607,825	18,376	18,638	215.7	215.3	71.7	71.6
1987	46,960,095(1)	28,888,630	17,675	19,292	265.7	185.7	86.4	60.4

(1) Estimate computed by API based on wellhead price times production.

Sources: Dollar value and production, U.S. Energy Information Administration
Producer Price Index, U.S. Bureau of Labor Statistics
Price at wellhead computed by the American Petroleum Institute

Section VI
Table 8

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-	$2.90
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	$1.58	2.20
Arizona	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas	$1.82	$2.48	$2.48	$2.46	$2.48	$2.46	$2.60	$2.73	$2.71	$2.69	$2.92	$2.82	$2.77	$2.77
California	1.72	2.42	2.26	2.16	2.25	2.23	2.49	2.55	2.50	2.62	3.05	2.90	2.55	2.46
Colorado	1.89	2.56	2.55	2.55	2.54	2.55	2.71	2.77	2.75	2.78	3.02	2.99	2.90	2.90
Florida	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	2.10	2.77	2.77	2.77	2.77	2.76	2.89	2.98	2.91	2.93	3.12	3.00	2.99	2.96
Indiana	2.10	2.77	2.77	2.76	2.75	2.75	2.93	2.96	2.91	2.93	3.13	3.01	2.97	2.94
Kansas	1.93	2.60	2.58	2.57	2.57	2.56	2.69	2.81	2.80	2.79	3.01	3.00	2.91	2.90
Kentucky	2.11	2.77	2.76	2.76	2.77	2.76	2.91	2.92	2.89	2.91	3.13	2.95	2.81	2.85
Louisiana	2.01	2.68	2.66	2.65	2.65	2.64	2.81	2.93	2.93	2.93	3.32	3.26	3.16	3.14
Michigan	2.13	2.86	2.75	2.70	2.72	2.66	2.92	2.96	2.92	2.87	3.06	2.94	2.94	2.91
Mississippi	1.76	2.41	2.46	2.31	2.24	2.23	2.36	2.50	2.46	2.45	2.91	2.86	2.84	2.83
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana	1.94	2.58	2.58	2.52	2.47	2.25	2.16	2.20	2.26	2.58	2.70	2.65	2.56	2.41
Nebraska	1.85	2.43	2.21	2.13	2.33	2.44	2.71	2.75	2.75	2.79	2.98	2.94	2.88	2.87
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	1.77	2.45	2.44	2.43	2.45	2.47	2.63	2.75	2.74	2.75	2.99	2.98	2.85	2.85
New York	4.21	4.94	3.56	3.78	4.23	4.23	4.28	3.42	3.55	4.40	4.73	4.23	4.24	4.64
North Dakota	-	-	-	-	-	2.00	2.00	2.14	2.89	2.90	3.13	2.99	2.80	2.71
Ohio	3.36	4.22	2.93	3.03	3.05	2.99	2.69	2.76	2.89	3.14	3.23	2.89	2.87	2.97
Oklahoma	1.92	2.58	2.56	2.57	2.57	2.56	2.70	2.79	2.78	2.78	3.03	2.96	2.92	2.92
Pennsylvania	4.19	4.96	3.57	3.82	4.25	4.25	4.29	3.42	3.54	4.34	4.73	4.10	4.20	4.55
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	1.95	2.61	2.59	2.59	2.58	2.58	2.73	2.84	2.84	2.83	3.11	3.06	2.98	2.96
Utah	-	-	-	-	-	-	-	-	-	-	2.27	2.99	2.86	2.74
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	3.90	4.76	3.09	3.33	3.76	3.76	3.81	2.93	3.05	3.86	4.26	3.49	3.60	4.07
Wyoming	1.68	2.33	2.28	2.16	2.15	2.18	2.37	2.45	2.41	2.44	2.66	2.61	2.50	2.51
Other	1.53	2.00	2.00	2.00	2.00	2.00	2.09	2.29	2.18	2.26	2.90	2.93	2.94	2.45
Total	1.93	2.60	2.54	2.51	2.53	2.53	2.68	2.78	2.77	2.79	3.09	3.01	2.90	2.88

Source: U.S. Bureau of Mines. Annual Petroleum Statements

Section VI
Table 8a

U.S. AVERAGE WELLHEAD VALUE PER BARRELOF CRUDE OIL BY STATE

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	$2.75	$2.59	$2.59	$2.60	$2.61	$2.60	$2.65	$2.67	$2.70	$2.84	$3.00	$3.07	$3.58	$8.54	$10.13	10.57	9.67	10.77	14.94	20.57
Alaska	2.79	3.04	3.04	3.04	3.06	3.06	3.13	2.82	2.90	3.01	3.24	3.23	3.62	4.92	5.22	5.03	5.84	6.02	10.74	15.63
Arizona	-	-	-	-	2.85	2.80	2.80	2.85	2.90	2.96	3.17	2.25	3.86	5.25	5.25	5.25	5.25	5.92	8.29	12.30
Arkansas	2.75	2.66	2.66	2.66	2.66	2.66	2.70	2.73	2.83	2.87	3.11	3.15	3.92	7.43	8.88	9.65	9.93	12.94	14.73	24.17
Calif.	2.43	2.50	2.48	2.43	2.38	2.35	2.31	2.35	2.45	2.54	2.72	2.71	3.11	5.30	6.03	6.15	7.31	7.22	12.60	22.72
Colorado	2.88	2.88	2.88	2.88	2.88	2.91	2.92	2.95	3.12	3.18	3.39	3.41	4.25	7.57	9.60	9.65	10.10	9.92	13.14	20.69
Florida	-	-	-	-	-	-	-	-	-	-	-	3.18	4.59	9.66	11.71	11.24	11.67	12.00	13.07	18.84
Illinois	2.99	2.98	2.98	2.93	2.93	3.00	3.04	3.07	3.18	3.25	3.47	3.47	4.32	8.87	10.48	10.18	12.27	13.80	23.49	35.36
Indiana	2.98	2.98	2.96	2.85	2.84	3.00	2.98	3.05	3.19	3.20	3.42	3.42	3.92	8.62	10.54	10.89	12.46	13.29	23.56	35.15
Kansas	2.89	2.91	2.91	2.92	2.92	2.95	3.00	3.02	3.20	3.27	3.52	3.52	4.25	7.96	9.50	9.50	10.00	13.20	22.00	34.21
Kentucky	2.97	2.95	2.92	2.87	2.87	2.85	2.90	2.93	3.11	3.15	3.36	3.36	3.97	8.72	11.19	11.42	13.02	13.73	22.58	34.98
Louisiana	3.15	3.15	3.12	3.11	3.10	3.11	3.12	3.14	3.30	3.38	3.59	3.59	4.00	6.53	7.09	7.51	8.33	9.42	11.40	19.38
Michigan	2.92	2.85	2.85	2.81	2.79	2.87	2.89	2.95	3.07	3.10	3.27	3.20	4.07	8.59	10.74	10.84	11.00	12.34	14.94	21.55
Miss.	2.82	2.78	2.76	2.67	2.64	2.65	2.72	2.80	2.92	2.99	3.15	3.15	3.81	6.10	6.66	7.14	8.20	8.11	13.95	15.80
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
Montana	2.42	2.42	2.44	2.43	2.43	2.44	2.50	2.57	2.69	2.78	3.01	3.07	3.33	6.65	7.83	8.42	8.58	9.25	12.39	22.24
Nebraska	2.85	2.83	2.83	2.70	2.66	2.72	2.75	2.79	2.98	3.09	3.38	3.38	3.87	6.83	9.01	8.99	10.46	11.40	16.75	30.49
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
New Mex.	2.86	2.88	2.88	2.87	2.81	2.84	2.92	2.95	3.13	3.20	3.40	3.41	4.10	7.22	8.29	8.84	9.23	10.01	14.06	23.82
New York	4.76	4.60	4.59	4.44	4.44	4.57	4.58	4.63	4.52	4.52	4.70	4.81	5.60	10.65	12.22	12.25	14.20	14.74	23.78	37.39
N. Dakota	2.72	2.75	2.73	2.48	2.50	2.55	2.60	2.64	2.80	3.05	3.27	3.28	3.90	6.04	7.32	7.84	8.00	8.55	12.00	14.99
Ohio	3.09	3.10	3.15	2.93	2.94	3.00	3.17	3.19	3.29	3.34	3.60	3.76	5.08	9.83	11.89	11.77	13.16	13.81	22.52	36.23
Oklahoma	2.91	2.92	2.91	2.90	2.89	2.91	2.93	2.99	3.12	3.19	3.40	3.41	3.78	7.18	8.52	9.19	9.98	10.90	15.03	27.38
Penn.	4.71	4.57	4.56	4.32	4.32	4.45	4.49	4.49	4.52	4.52	4.66	4.77	5.62	10.41	12.15	12.16	14.29	14.77	24.09	37.44
S. Dakota	-	-	-	2.00	2.00	2.00	2.38	2.15	2.29	2.34	2.59	2.62	3.59	6.65	12.70	12.35	12.00	12.13	25.28	28.75
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.51	13.72	13.75	12.70	20.26	34.29
Texas	2.97	2.99	2.97	2.96	2.96	2.97	3.01	3.04	3.21	3.28	3.48	3.48	3.98	6.95	7.64	8.59	8.78	9.29	12.62	21.59
Utah	2.75	2.74	2.72	2.62	2.61	2.64	2.63	2.67	2.80	2.81	3.04	3.04	3.61	7.11	8.23	9.30	9.33	9.98	11.41	19.80
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Va.	4.14	4.00	3.99	3.85	3.85	3.98	4.00	3.97	3.83	3.80	3.91	4.50	5.02	10.15	11.99	12.00	13.97	14.50	28.00	37.00
Wyoming	2.50	2.49	2.50	2.53	2.50	2.56	2.58	2.64	2.80	2.93	3.10	3.09	3.82	6.53	7.24	7.24	7.62	9.16	8.50	21.37
Other	2.31	2.10	2.06	2.14	2.10	2.19	2.28	2.30	2.47	2.52	2.91	2.89	3.48	8.72	6.33	11.22	10.98	9.82	12.41	19.14
Total	2.89	2.90	2.89	2.88	2.86	2.88	2.92	2.94	3.09	3.18	3.39	3.39	3.89	6.74	7.56	8.14	8.57	8.96	12.51	20.89

(1) Included with other.

Source: U.S. Bureau of Mines. Annual Petroleum Statements

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE
(Dollars per Barrel)

STATE	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Alabama	$10.57	$9.67	$10.52	$11.79	$20.57	$35.80	$32.32	$30.07	$29.39	$25.77	$13.91
Alaska	5.03	6.14	5.23	10.25	16.52	23.60	20.08	17.92	18.13	17.12	6.71
Arizona(1)	5.25	5.25	5.92	8.29	12.30	24.00	31.00	30.00	28.00	27.00	15.15
Arkansas	9.65	9.93	10.63	14.72	24.17	33.69	30.12	28.28	28.15	25.79	14.54
California	6.15	7.31	8.58	12.78	23.87	26.80	24.58	22.61	22.09	22.14	11.90
Colorado	9.65	10.10	10.84	13.28	22.91	35.69	31.56	28.92	28.09	25.64	13.98
Florida(1)	11.24	11.67	12.00	13.07	18.84	25.00	32.00	31.10	31.00	29.00	23.13
Illinois	10.18	12.27	13.81	23.49	35.78	36.03	31.69	29.12	28.76	26.90	14.70
Indiana	10.89	12.46	13.70	23.28	35.91	36.07	31.66	29.06	28.72	26.82	14.55
Kansas	9.50	10.00	13.20	21.57	34.20	35.80	30.79	28.45	27.99	25.33	14.02
Kentucky	11.42	13.02	13.73	22.55	34.98	35.90	31.19	28.60	28.24	26.20	14.20
Louisiana	7.51	8.33	9.03	11.42	19.87	35.45	32.44	30.02	29.67	27.22	15.32
Michigan	10.84	11.00	11.86	14.47	23.54	35.74	31.80	28.93	28.54	26.16	14.61
Mississippi	7.14	8.20	7.91	10.74	20.85	30.47	29.04	26.76	27.26	25.51	13.63
Missouri(1)	13.30	12.50	12.25	25.68	37.75	34.38	31.25	31.20	27.50	25.00	15.25
Montana	8.42	8.58	9.04	12.03	20.53	34.69	31.25	28.80	28.07	25.29	13.58
Nebraska	8.99	10.46	11.40	18.13	30.60	35.32	30.98	28.58	27.83	25.42	13.70
Nevada(1)	10.35	11.50	12.00	11.54	16.65	23.96	23.95	23.80	25.80	26.00	12.00
New Mexico	8.84	9.23	10.17	14.33	24.06	35.04	31.82	29.26	28.69	26.8[illegible]	14.93
New York	12.25	14.20	14.74	23.78	37.39	34.15	30.91	28.19	27.70	25.1[illegible]	16.03
North Dakota	7.84	8.00	9.75	13.64	26.42	35.63	31.89	29.27	28.39	25.32	13.54
Ohio	11.77	13.16	13.80	22.79	36.64	36.11	30.90	28.14	27.71	25.11	15.51
Oklahoma	9.19	9.98	11.30	17.53	29.25	35.43	32.04	29.67	29.11	26.28	1[illegible].47
Pennsylvania	12.16	14.29	14.72	24.13	37.46	36.03	30.77	28.28	27.71	25.05	15.77
South Dakota	12.35	12.00	12.16	15.35	28.81	35.55	31.63	29.10	28.36	25.79	13.81
Tennessee(1)	13.72	13.75	12.70	20.26	34.29	33.00	32.10	32.00	29.00	26.00	15.00
Texas	8.59	8.78	9.29	12.65	21.84	35.06	31.77	29.35	28.87	26.80	14.73
Utah	9.30	9.33	9.98	11.41	19.79	34.14	30.50	28.12	27.21	23.98	13.33
Virginia(1)	11.68	12.50	12.50	24.80	37.21	36.25	32.35	32.25	27.28	24.75	15.00
West Virginia	12.00	13.97	14.48	23.35	36.92	35.63	29.98	27.27	26.90	24.35	14.68
Wyoming	7.24	7.62	9.16	11.73	21.34	32.30	29.37	27.19	26.73	24.67	12.94
U.S. TOTAL	8.15	8.57	9.00	12.64	21.59	31.77	28.52	26.19	25.88	24.09	12.51

(1) Beginning in 1981, these figures were estimated by IPAA (including years proir to 1981).
Note: Data represent the average first purchase prices of crude at the lease or wellhead.

Source: Department of Energy, Energy Information Administration, Petroleum Marketing Monthly.

Section VI
Table 8c

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE
(Dollars per Barrel)

State	1987
Alabama	16.76
Alaska	10.95
Arizona(2)	17.35
Arkansas	17.23
California	13.91
Colorado	17.71
Florida(2)	16.05
Illinois	17.53
Indiana	17.49
Kansas	17.37
Kentucky	17.19
Louisiana	17.97
Michigan	17.63
Mississippi	16.78
Missouri(2)	17.25
Montana	16.57
Nebraska	17.07
Nevada(2)	11.50
New Mexico	17.58
New York	17.40
North Dakota	16.74
Ohio	17.42
Oklahoma	17.62
Pennsylvania	17.43
South Dakota	16.96
Tennessee(2)	15.84
Texas	17.54
Utah	17.25
Virginia(2)	15.75
West Virginia	16.56
Wyoming	16.44
U.S. TOTAL	15.41

(2) Prices for these states was estimated by the IPAA
Note: Data represent the average first purchase prices of crude at the lease or wellhead.

Source: Department of Energy, Energy Information Administration.

Section VI
Table 9

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	-	-	-	5.0	5.0	4.0	5.0	6.0	7.1	7.9	6.4	9.2	9.7	7.3
Alaska	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0	12.2
Arizona	-	-	-	-	-	-	-	-	-	14.0	-	-	-	-
Arkansas	3.6	4.5	4.0	3.5	4.0	4.1	5.3	5.5	5.6	6.0	7.2	8.1	8.7	11.9
California	10.2	11.3	11.8	11.9	14.6	16.7	19.7	20.6	22.2	22.5	23.7	23.3	24.6	26.7
Colorado	7.9	6.0	5.2	3.9	4.3	5.5	5.8	8.7	9.9	9.8	10.0	10.5	11.0	11.9
Florida	3.2	3.7	4.1	5.2	7.3	6.7	6.8	8.3	10.4	8.3	13.0	13.6	14.3	16.2
Illinois	9.2	12.3	11.3	10.1	15.3	16.2	16.8	14.2	12.9	15.1	15.5	14.8	13.9	12.5
Indiana	9.1	9.8	7.4	7.0	9.8	9.5	7.0	6.0	12.4	12.1	13.1	15.6	19.0	17.8
Kansas	5.1	5.0	5.4	6.6	8.1	8.3	8.6	10.6	11.1	11.3	11.4	11.4	12.0	11.7
Kentucky	15.0	18.4	19.1	19.7	21.7	21.7	21.9	22.8	23.7	23.1	23.8	24.1	23.7	24.4
Louisiana	3.6	3.9	4.4	5.3	5.8	6.7	8.2	8.9	11.3	11.4	11.2	12.9	15.4	17.1
Maryland	-	-	-	19.8	20.0	19.4	19.0	20.2	20.1	25.3	26.2	26.9	27.0	26.6
Michigan	12.7	14.7	15.2	13.2	14.8	14.6	16.4	17.8	11.5	13.3	18.8	18.6	23.0	21.4
Mississippi	5.0	5.6	6.2	6.3	6.3	6.1	8.0	8.3	9.6	9.8	10.3	13.9	15.5	18.8
Missouri	13.2	18.5	16.7	14.3	14.3	18.8	20.0	18.8	20.0	16.7	16.7	-	-	25.0
Montana	4.6	4.6	5.6	5.3	5.5	6.1	5.9	6.8	6.1	6.8	7.2	6.8	7.5	7.1
Nebraska	-	-	-	11.8	12.8	13.3	13.5	11.7	20.4	21.0	16.0	15.0	15.9	17.5
New Mexico	1.8	2.7	2.9	3.0	3.8	4.6	6.1	7.8	8.9	8.8	9.4	10.4	10.0	10.7
New York	24.3	22.1	24.6	25.1	25.1	29.2	31.6	32.6	29.5	28.3	28.4	30.6	30.5	30.9
North Dakota	3.2	3.0	5.2	5.1	5.2	6.1	6.8	6.3	7.7	8.1	9.5	9.7	9.9	11.4
Ohio	19.7	19.7	19.3	19.4	20.2	21.7	22.2	21.2	22.5	24.0	23.7	21.4	23.2	23.5
Oklahoma	3.9	4.9	4.7	4.9	5.3	5.4	6.9	7.0	7.4	8.0	8.3	10.1	10.0	11.9
Pennsylvania	23.7	24.1	25.6	25.3	27.7	28.3	29.1	29.9	29.9	32.2	31.1	28.3	29.2	31.8
South Dakota	6.0	6.5	6.3	-	5.0	5.0	5.0	5.0	-	-	-	-	-	-
Tennessee	6.3	9.4	9.1	10.0	9.4	10.3	12.0	11.5	12.9	12.9	15.8	16.7	16.7	17.5
Texas	3.7	4.5	4.6	4.7	5.4	6.2	7.6	8.5	8.0	8.7	9.7	10.0	10.8	11.3
Utah	5.4	6.0	6.0	6.0	6.6	7.5	11.4	14.1	13.9	14.1	14.7	14.7	14.2	18.0
Virginia	9.4	9.5	7.7	8.7	15.6	24.6	25.8	27.1	26.8	27.7	26.8	27.0	26.2	27.1
West Virginia	15.4	16.7	16.2	16.8	18.6	19.6	23.6	23.8	23.5	23.7	23.8	24.8	26.0	26.2
Wyoming	5.0	5.9	5.6	6.0	7.5	7.8	7.9	8.4	8.5	8.6	8.7	8.4	8.1	12.0
Total	6.0	6.5	6.3	6.5	7.3	7.8	9.2	10.1	10.4	10.8	11.3	11.9	12.9	14.0

Source: U.S. Bureau of Mines, Minerals Yearbooks and Natural Gas Annuals

Section VI
Table 9a

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	7.4	9.8	11.8	10.9	12.7	12.8	12.7	13.1	13.4	13.9	15.1	35.2	38.2	74.3	87.0	98.5
Alaska	20.4	21.4	24.7	27.6	24.8	24.8	25.0	25.3	25.9	24.6	14.7	14.7	14.9	17.0	30.2	38.9
Arizona	-	11.9	12.1	12.0	12.1	13.8	15.4	16.1	17.5	17.1	17.8	18.1	18.4	20.0	28.0	28.2
Arkansas	13.5	14.9	15.5	15.6	15.6	15.6	15.3	15.6	15.8	16.3	17.1	17.3	18.4	26.0	34.7	53.0
California	28.3	29.0	29.3	30.1	30.9	31.0	29.7	30.9	30.6	32.1	32.6	36.8	37.3	44.0	70.0	94.0
Colorado	11.6	11.6	11.7	11.9	12.9	13.0	13.3	13.5	14.5	14.7	15.6	16.5	17.7	20.0	26.0	48.0
Florida	18.9	20.7	20.0	13.5	12.9	14.2	14.8	15.2	15.7	-	29.9	32.0	34.3	53.6	97.3	98.2
Illinois	12.8	14.3	12.9	11.6	11.7	11.9	11.7	12.6	14.1	15.7	28.0	28.0	35.0	40.0	70.0	98.5
Indiana	20.1	21.1	23.4	23.6	23.6	23.7	23.4	23.4	23.6	23.7	16.5	15.5	13.8	14.0	39.0	52.0
Kansas	12.5	12.4	13.3	12.6	13.3	13.5	13.4	13.8	13.9	14.0	14.4	14.4	15.5	16.6	17.2	42.0
Kentucky	24.8	24.8	23.9	23.7	23.6	23.7	24.0	25.0	25.1	24.6	25.1	25.1	35.0	50.0	54.0	55.0
Louisiana	18.7	19.7	19.8	19.1	18.2	18.3	18.5	18.9	19.2	19.3	20.2	20.4	22.4	30.7	42.3	46.0
Maryland	27.2	27.0	26.9	26.7	25.2	26.0	25.6	25.6	25.4	24.9	20.0	20.9	23.3	24.0	27.0	32.3
Michigan	21.1	21.3	27.1	25.4	25.1	15.2	24.7	25.1	25.7	26.7	26.4	30.7	39.2	50.4	63.4	89.5
Mississippi	18.6	19.0	18.0	17.4	17.3	17.4	17.3	16.7	17.6	18.4	20.9	21.8	22.9	29.5	49.6	71.0
Missouri	24.7	25.0	27.0	24.3	24.5	-	24.5	28.6	13.8	24.5	24.8	24.9	24.2	31.4	34.0	34.5
Montana	7.4	7.4	7.5	7.8	8.2	8.3	8.4	9.1	10.2	10.3	12.1	12.3	23.6	25.3	43.3	44.5
Nebraska	16.7	18.2	18.8	15.4	14.6	15.9	17.2	17.5	17.3	17.1	17.5	17.8	18.2	34.0	54.1	51.3
New Mexico	10.9	11.5	11.9	11.7	11.8	12.5	13.0	13.4	13.7	14.3	15.0	18.5	23.6	31.4	40.5	56.5
New York	29.5	28.1	29.5	31.0	30.8	31.0	31.3	31.9	30.0	30.3	30.0	32.6	35.0	55.0	74.0	113.0
North Dakota	12.6	13.7	19.1	22.1	16.0	16.2	16.4	16.5	16.2	16.4	16.7	16.8	19.7	19.9	23.0	34.0
Ohio	24.9	25.6	24.2	23.9	23.6	23.7	24.1	24.7	25.8	27.1	33.8	39.2	42.5	48.2	70.6	101.8
Oklahoma	12.1	12.8	13.0	12.7	13.8	14.0	14.3	14.2	15.3	15.6	16.3	16.3	18.9	28.0	32.0	50.2
Pennsylvania	29.4	27.2	26.0	27.3	26.7	28.4	28.1	27.8	17.6	27.9	27.2	30.3	42.0	44.0	67.5	68.5
Tennessee	18.3	18.5	18.9	19.5	19.0	-	19.0	19.4	19.6	19.9	22.1	30.0	30.0	36.0	43.0	71.0
Texas	12.3	12.3	12.5	12.5	12.9	13.0	13.2	13.5	13.7	14.4	16.1	16.4	20.4	31.1	51.9	71.8
Utah	15.7	16.8	18.2	13.7	12.5	12.7	13.2	15.8	15.4	15.1	16.7	17.0	19.1	41.2	48.0	50.5
Virginia	27.1	27.1	23.4	29.9	29.9	30.0	30.1	29.9	29.7	30.8	31.4	32.0	33.1	51.0	51.5	114.0
West Virginia	27.4	27.5	26.6	25.1	23.5	23.6	24.1	26.2	27.0	25.4	25.9	30.0	30.9	32.8	36.9	57.0
Wyoming	12.5	14.6	14.2	12.9	13.5	14.5	14.6	14.6	14.7	14.7	15.3	16.2	18.1	24.5	33.7	41.0
Total	15.1	15.5	15.8	15.4	15.6	15.7	16.0	16.4	16.7	17.1	18.2	18.6	21.6	30.4	44.5	58.0

Source: U.S. Bureau of Mines, Minerals Yearbooks and Natural Gas Annuals

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	147.0	150.0	203.9	318.6	477.0	344.0	428.0	373.0	371.0	289.0	297.0
Alaska	40.2	52.1	51.8	73.2	62.0	63.0	73.0	73.0	74.0	50.0	94.0
Arizona	32.5	37.0	41.3	NA	NA	259.0	308.0	290.0	NA	NA	NA
Arkansas	58.5	75.0	95.9	69.6	181.0	213.0	229.0	254.0	255.0	251.0	229.0
California	116.9	135.7	170.5	217.0	257.0	309.0	357.0	380.0	336.0	289.0	237.0
Colorado	81.0	84.0	141.0	147.0	197.0	317.0	338.0	343.0	290.0	205.0	176.0
Florida	108.9	139.0	157.2	173.0	271.0	246.0	233.0	257.0	243.0	120.0	168.0
Illinois	120.0	129.0	186.1	190.0	247.0	262.0	284.0	278.0	277.0	257.0	224.0
Indiana	69.0	71.0	105.4	135.0	208.0	155.0	209.0	338.0	251.0	123.0	171.0
Kansas	48.5	57.0	75.6	77.2	92.0	151.0	157.0	149.0	127.0	121.0	115.0
Kentucky	55.0	58.0	94.7	89.3	101.0	152.0	151.0	170.0	239.0	188.0	182.0
Louisiana	70.3	83.6	111.5	160.7	207.0	260.0	267.0	273.0	266.0	221.0	178.0
Maryland	39.0	61.4	103.6	45.6	48.0	78.0	55.0	55.0	59.0	65.0	55.0
Michigan	101.0	119.7	174.0	235.5	286.0	319.0	358.0	376.0	360.0	360.0	324.0
Mississippi	73.0	114.6	160.0	231.7	321.0	391.0	378.0	347.0	317.0	213.0	194.0
Missouri	42.0	--	--	--	--	--	--	375.0	350.0	375.0	375.0
Montana	71.9	84.7	121.1	145.4	191.0	215.0	241.0	246.0	239.0	205.0	180.0
Nebraska	65.2	68.0	85.0	82.9	145.0	199.0	293.0	224.0	301.0	282.0	242.0
New Mexico	81.0	98.8	136.6	175.8	213.0	247.0	268.0	271.0	262.0	187.0	166.0
New York	116.0	119.0	126.6	194.9	267.0	375.0	385.0	400.0	337.0	339.0	200.0
North Dakota	35.3	46.2	128.0	118.8	194.0	230.0	227.0	226.0	190.0	135.0	130.0
Ohio	139.7	157.0	180.5	197.7	217.0	271.0	324.0	319.0	308.0	284.0	258.0
Oklahoma	79.0	90.2	112.4	150.7	188.0	274.0	283.0	272.0	247.0	171.0	147.0
Oregon	--	--	213.0	240.0	260.0	333.0	333.0	278.0	240.0	200.0	145.0
Pennsylvania	80.0	86.0	132.6	212.7	233.0	280.0	300.0	325.0	316.0	250.0	225.0
South Dakota	--	--	210.7	NA	275.0	308.0	337.0	367.0	251.0	246.0	271.0
Tennessee	74.0	164.0	170.0	176.0	255.0	300.0	250.0	350.0	248.0	178.0	131.0
Texas	90.3	99.5	123.4	156.5	187.0	217.0	236.0	245.0	233.0	165.0	147.0
Utah	61.2	64.3	71.6	111.7	110.0	306.0	340.0	408.0	352.0	290.0	188.0
Virginia	126.0	131.3	168.1	285.0	215.0	369.0	330.0	300.0	302.0	245.0	208.0
West Virginia	61.0	65.8	105.0	300.0	300.0	320.0	310.0	345.0	385.0	390.0	385.0
Wyoming	64.0	79.3	113.0	192.0	277.0	322.0	318.0	332.0	301.0	252.0	176.0
Total	79.0	90.5	117.8	159.0	198.0	246.0	259.0	266.0	251.0	194.0	167.0

Source: U.S. Energy Information Administraton, Natural Gas Annuals

Section VI
Table 10

POSTED PRICES OF KEY FOREIGN CRUDE OILS

(In U.S. $ per barrel. Postings in effect on dates shown or thereabouts.)
Prices are not actual sales prices, but prices posted by governments for computing oil company taxes.

CRUDE &		1970	1971(1)	1972	1973(1)				1974			1975		1977	
GRAVITY		31 Aug	15 Feb	20 Jan	1 Jan	1 Oct	16 Oct	1 Nov	1 Jan	1 July	1 Nov	1 Jan	1 Oct	1 Jan	1 July
PERSIAN/ARABIAN GULF CRUDES															
Saudi Arabia															
Arab Light	34o	1.80	2.18	2.48	2.59	3.01	5.12	5.18	11.65	11.25	11.25	11.25	12.38	13.00	13.66
Arab Berri	39	1.90	2.26	2.55	2.67	3.09	5.68	5.74	12.35	12.35	11.95	11.95	12.77	13.42	14.22
Arab Medium	31	1.59	2.09	2.37	2.48	2.88	4.90	4.96	11.56	11.56	11.16	11.16	12.23	12.57	13.25
Arab Heavy	27	1.47	1.97	2.24	2.35	2.73	4.63	4.68	11.44	11.44	11.04	11.04	12.09	12.23	12.92
Iran															
Iran Light	34	1.79	2.17	2.47	2.58	3.00	5.34	5.40	11.88	11.88	11.48	11.48	12.50	13.77	13.77
Iran Heavy	31	1.63	2.13	2.41	2.53	2.94	4.99	5.05	11.64	11.64	11.24	11.24	12.36	13.43	13.43
Kuwait															
Kuwait	31	1.59	2.09	2.37	2.48	2.88	4.90	4.96	11.55	11.55	11.15	11.15	12.26	NA	NA
Abu Dhabi															
Murban	39	1.88	2.24	2.54	2.65	3.08	6.05	6.11	12.64	12.64	12.24	11.69	12.82	13.44	14.26
Marine (Umm Shaif)	37	1.86	2.23	2.53	2.64	3.07	5.54	5.60	12.09	12.09	11.69	11.45	12.58	13.20	14.02
Zakum	40	1.92	2.27	2.57	2.69	3.12	5.96	6.03	12.57	12.57	12.17	11.59	12.72	13.34	14.16
Iraq															
Basrah	35	1.72	2.16	2.45	2.56	2.98	5.06	5.12	11.67	11.67	11.27	11.28	12.40	NA	NA
Qatar															
Dukhan	40	1.93	2.28	2.59	2.71	3.14	5.83	5.90	12.41	12.41	12.01	12.01	12.74	14.18	14.18
Marine	36	1.83	2.20	2.50	2.61	3.04	5.50	5.56	12.01	12.01	11.61	11.61	12.54	13.98	13.98
Oman															
Oman	34	1.84	2.22	2.52	2.63	3.06	5.74	5.80	12.30	12.30	11.90	11.90	12.51	13.68	13.98
MEDITERRANEAN & AFRICAN CRUDES															
Saudi Arabia															
Arab Light	34	2.17	2.37	3.37	3.45	4.21	7.15	7.23	13.65	13.65	13.25	13.25	13.25	NA	NA
Iraq															
Kirkuk	36	2.21	2.41	3.40	3.48	4.24	7.21	7.29	NA	NA	NA	NA	NA	NA	NA
Libya															
Libya	40	2.18	2.55	3.67	3.78	4.60	8.93	9.06	15.77	15.77	15.77	15.77	16.06	18.25	18.78
Nigeria															
Nigeria	34	2.17	2.42	3.18	3.56	4.29	8.31	8.40	14.69	14.69	14.69	14.69	13.07	NA	NA
VENEZUELAN CRUDES (Reference Prices)															
Venezuela															
Tia Juana	26	2.01	2.09	2.95	3.09	4.93	4.93	7.26	13.84	14.31	14.31	13.54	14.64	NA	NA
Tia Juana	31	2.19	2.27	3.09	3.25	5.20	5.20	7.56	14.36	14.91	14.91	14.13	15.58	NA	NA
Oficina	35	2.34	2.42	3.26	3.40	5.45	5.45	7.80	14.88	15.44	15.44	14.67	16.17	NA	NA

NA Not Available
(1) Representative postings. Does not include price changes for 1 June 1971; 1 April, 1 June, 1 July, 1 August, 1 December 1973.

Source: Petroleum Intelligence Weekly

Section VI
Table 10a

POSTED PRICES OF KEY FOREIGN CRUDE OILS

(In U.S. $ per barrel. Postings in effect on dates shown or thereabouts.)
Prices are not actual sales prices, but prices posted by governments for computing oil company taxes.

PERSIAN/ARABIAN GULF CRUDES

CRUDE & GRAVITY		1979 1 Jan
Saudi Arabia		
Arab Light	34o	14.34
Arab Berri	39	14.93
Arab Medium	31	13.91
Arab Heavy	27	13.57
Iran		
Iran Light	34	14.45
Iran Heavy	31	14.10
Kuwait		
Kuwait	31	NA
Abu Dhabi		
Murban	39	14.97
Marine (Umm Shaif)	37	14.72
Zakum	40	14.87
Iraq		
Basrah	35	NA
Qatar		
Dukhan	40	14.89
Marine	36	14.68
Oman		
Oman	34	14.68

NOTE:
Posted prices are no longer available

MEDITERRANEAN & AFRICAN CRUDES

CRUDE & GRAVITY		1979 1 Jan
Saudi Arabia		
Arab Light	34	NA
Iraq		
Kirkuk	36	NA
Libya		
Libya	40	19.72
Nigeria		
Nigeria	34	NA

VENEZUELAN CRUDES (Reference Prices)

CRUDE & GRAVITY		1979 1 Jan
Venezuela		
Tia Juana	26	NA
Tia Juana	31	NA
Oficina	35	NA

NA Not Available

Source: Petroleum Intelligence Weekly

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE & GRAVITY		1974				1975			1976		1977	
		1 Jan.	1 June	1 Oct.	1 Nov.	1 Jan.	1 Oct.	14 Feb.	1 June	1 Oct.	1 Jan.	1 July
PERSIAN / ARABIAN CRUDES												
Saudi Arabia												
Arab Light	34o	10.95	11.05	10.84	10.46	10.46	11.51	11.51	11.51	11.51	12.09	12.70
Arab Berri	39	11.61	11.71	11.49	11.11	11.11	11.87	11.87	11.87	11.87	12.48	13.22
Arab Medium	31	10.87	10.97	10.75	10.38	10.38	11.33	11.33	11.28	11.28	11.69	12.32
Arab Heavy	27	10.76	10.85	10.64	10.27	10.27	11.14	11.14	11.14	11.04	11.37	12.02
Iran												
Iran Light	34	11.16	11.26	11.04	10.67	10.67	11.62	11.62	11.62	11.62	12.81	12.81
Iran Heavy	31	10.94	11.04	10.82	10.45	10.45	11.50	11.40	11.33	11.33	12.49	12.49
Kuwait												
Kuwait	31	10.85	10.95	10.74	10.37	10.37	11.30	11.30	11.23	11.23	12.37	12.27
Abu Dhabi												
Murban	39	11.88	11.88	11.75	11.38	10.87	11.92	11.92	11.92	11.92	12.50	13.26
Umm Shaif	37	11.36	11.36	11.24	10.87	10.65	11.70	11.70	11.70	11.70	12.28	13.04
Zakum	40	11.81	11.81	11.69	11.31	10.78	11.83	11.83	11.83	11.83	12.41	13.17
Iraq												
Basrah	35	10.97	10.97	10.86	10.48	10.48	11.45	11.45	11.45	11.46e	12.65e	12.65e
Kirkuk	36	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	11.60e	11.65	11.70e	12.89e	12.85e
Qatar												
Dukhan	40	11.67	11.67	11.55	11.17	11.17	11.85	11.85	11.85	11.85	13.19	13.19
Marine	36	11.29	11.29	11.17	10.80	10.80	11.66	11.66	11.66	11.66	13.00	13.00
Oman												
Oman	34	11.56	11.56	11.44	11.07	11.07	11.63	11.63	11.70	11.70e	12.74	13.00
MEDITERRANEAN AND AFRICAN CRUDES												
Iraq												
Kirkuk	36	N.A.	N.A.	N.A.	N.A.	10.67	11.74e	11.95e	N.A.	N.A.	N.A.	13.50
Libya												
Brega	40	N.A.	N.A.	N.A.	N.A.	11.20	12.32	12.32	12.32	12.62	13.92	14.20
Nigeria												
Bonny	37	N.A.	N.A.	N.A.	N.A.	11.43	12.60	12.84	12.89	13.10	14.33	14.63
OTHER CRUDES												
Indonesia												
Sumatra Light	35	10.80	10.80	12.60	12.60	12.60	12.80	12.80	12.80	12.80	13.55	13.55
Venezuela												
Tia Juana	26	N.A.	N.A.	N.A.	N.A.	11.62	11.39	11.12	11.22	11.65	12.72	12.71
Tia Juana	31	N.A.	N.A.	N.A.	N.A.	11.05	12.06	12.30	12.30	12.30	12.35	13.54
Oficina	35	N.A.	N.A.	N.A.	N.A.	11.49	12.54	12.80	12.80	12.80	13.99(2)	N.A.
Ecuador												
Oriente	30	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	11.60	11.60	13.00	13.00

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e Estimates by PIW
N.A. Not available
(1) These are the governments' official prices applicable to sales to third parties and to crude sold back to companies still retaining and equity interest in Middle East oil producing ventures.
(2) Estimate by Petroleum Economist, October 1977

Source: Petroleum Intelligence Weekly

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE & GRAVITY		1979			1980		1981		1982	1983	1985
		1 Jan.	1 Apr.	1 July	1 Jan.	1 June	19 Feb.	1 Nov.	1 Jan.	Mar.	Feb.
					PERSIAN / ARABIAN CRUDES						
Saudi Arabia											
Arab Light	34o	13.34	14.55	18.00	26.00	28.00	32.00	34.00	34.00	29.00	28.00
Arab Berri	39	14.06	16.47	21.32	27.52	29.52	33.52	35.60	35.40	29.50	28.11
Arab Medium	31	12.89	14.05	17.54	25.45	27.45	31.45	33.00	32.40	27.40	27.40
Arab Heavy	27	12.51	13.64	17.17	25.00	27.00	31.00	31.50	31.00	26.00	26.50
Iran											
Iran Light	34	13.45	16.57	22.00(e)	28.50	35.37	37.00	34.60	34.20	28.00	28.05
Iran Heavy	31	13.06	16.04	19.90(e)	27.77	34.37	36.00	33.40	32.30	27.30(e)	27.35
Kuwait											
Kuwait	31	12.83	15.80	19.49	25.50	29.50	35.50	33.00	32.30	27.30	27.30
Abu Dhabi											
Murban	39	14.10	17.10	21.56	27.56	31.56	36.56	35.70	35.50	29.56	28.15
Umm Shaif	37	13.78	16.88	21.36	27.36	31.36	36.36	35.50	35.30	29.36	28.05
Zakum	40	14.01	17.01	21.46	27.46	31.46	36.46	35.60	35.40	29.46	28.10
Iraq											
Basrah Light	35	13.29	15.70	19.96	25.96	29.96	35.96	34.67	32.65(e)	28.46(e)	
Kirkuk	36	13.52	15.95	21.25	26.18	30.18	37.50	35.11	34.93	29.83	
Qatar											
Dukhan	44	14.03	17.04	21.42	27.42	31.42	37.42	35.65	35.45	29.49	28.10
Marine	36	13.77	16.85	21.23	27.23	31.23	37.23	35.50	35.30	29.30	28.05
Oman											
Oman	36	13.65(e)	14.88(e)	N.A.	30.26	35.56	37.56	34.06	35.06	30.06	
					MEDITERRANEAN AND AFRICAN CRUDES						
Libya											
Brega	40	14.69	18.25	23.45	34.67	36.67	41.00	37.50	37.00	30.50	
Nigeria											
Bonny	37	14.80	18.50	23.49	29.99	36.71	40.02	36.52	36.52	30.00	28.67
					OTHER CRUDES						
Indonesia											
Sumatra Light	34	14.23(e)	15.51(e)	N.A.	27.50	31.50	35.00	35.00	35.00	29.53	28.53
Venezuela											
Tia Juana	26	13.36	15.76	19.31	25.20	29.28	32.88	32.88	32.88	27.88	27.60
Tia Juana	31	14.22	16.70	20.90	26.90	32.40	36.00	35.00	35.00	29.84	28.24
Oficina	34	14.69	17.21	22.45	28.75	34.25	38.06	37.06	37.06	31.09	28.80
Ecuador											
Oriente	30	13.18	20.60	N.A.	31.00	N.A.	39.30(e)	33.15	33.25	28.25	

N.A. Not Available.
(e) Estimate.
(1) These are the governments' official prices applicable to sales to third parties and to crude sold back to companies still retaining an equity interest in Middle East oil producing ventures. Some prices are retroactive to prior dates.

Source: Petroleum Intelligence Weekly

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE AND GRAVITY		1987 Feb.
Saudi Arabia		
Arab Light	34½	17.52
Arab Berri	39	17.87
Arab Medium	31	16.92
Arab Heavy	27	16.27
Iran		
Iran Light	34	17.50
Iran Heavy	31	16.89
Kuwait		
Kuwait	31	16.67
Abu Dhabi		
Murban	39	17.92
Umm Shaif	37	17.30
Zakum	40	17.82
Iraq		
Basrah Light	35	17.30
Kirkuk	36	17.60
Qatar		
Dukhan	44	17.82
Marine	36	17.67
Oman		
Oman	36	17.63
		MEDITERRANEAN AND AFRICAN CRUDES
Libya		
Brega	40	18.67
Nigeria		
Bonny	37	18.92
		OTHER CRUDES
Indonesia		
Sumatra Lgt.	34	17.56
Venezuela		
Tia Juana	26	16.72
Tia Juana	31	17.62
Oficina	34	N.A.
Ecuador		
Oriente	30	17.02

N.A. Not available

Source: Petroleum Intelligence Weekly

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Cents per Gallon)

	1920	1930	1940	1950	1960	1970	1971	1972	1973	1974	1975	1976	1977
Average U.S.	29.83	19.95	18.41	26.76	31.13	35.69	36.43	36.13	38.82	52.41	57.22	59.47	63.07
Alabama, Birmingham	30.04	20.50	21.71	29.33	31.23	35.23	35.62	36.79	38.57	51.67	53.15	58.25	64.00
Arizona, Phoenix	32.50	20.71	21.25	26.47	26.57	35.07	35.90	35.40	38.28	51.32	57.73	60.48	63.65
Arkansas, Little Rock	30.42	17.63	20.83	29.17	29.48	34.32	35.57	34.65	36.98	50.66	57.34	60.32	64.40
California, Los Angeles	-	-	-	-	29.57	34.15	35.32	34.47	38.04	52.28	57.88	60.49	64.23
California, San Francisco	24.17	20.00	17.88	25.12	32.23	35.82	35.82	35.30	39.07	53.30	59.46	61.49	65.15
Colorado, Denver	31.42	19.50	18.38	26.46	33.40	33.73	36.48	35.15	38.87	52.25	58.18	61.23	64.07
Connecticut, Hartford	33.00	19.13	14.48	23.63	29.32	36.98	37.82	37.65	40.98	54.63	57.57	59.99	63.83
District of Columbia	29.46	17.23	15.08	25.36	30.32	35.73	36.05	37.65	39.07	54.33	58.48	60.40	64.31
Florida, Miami(2)	29.25	21.50	19.33	28.03	31.40	35.07	34.65	35.98	38.15	51.31	54.98	57.15	58.82
Georgia, Atlanta	30.04	22.17	20.42	29.71	31.87	35.01	36.23	36.15	38.57	52.59	58.23	58.99	63.65
Idaho, Boise	33.63	26.41	24.18	30.65	37.42	35.07	34.98	35.11	39.95	53.34	59.82	62.22	65.48
Illinois, Chicago	27.17	18.17	15.58	23.30	31.90	38.62	37.60	36.36	40.61	54.74	58.60	60.90	65.74
Indiana, Indianapolis	-	-	-	-	30.73	37.23	37.57	35.56	39.26	53.17	59.08	59.70	62.74
Iowa, Des Moines	27.42	18.33	16.78	25.08	31.57	35.32	36.32	37.23	38.45	51.17	57.32	60.33	64.79
Kansas, Wichita	26.80	15.30	14.99	24.70	29.15	32.98	32.98	32.40	37.78	51.17	57.32	61.33	63.49
Kentucky, Louisville	-	-	-	-	32.80	36.65	37.48	37.28	40.31	53.83	58.20	61.25	64.90
Louisiana, New Orleans	27.75	15.17	20.66	30.17	29.07	35.73	35.57	34.06	36.48	49.74	56.09	60.40	63.74
Maryland, Baltimore	29.58	18.77	17.88	25.74	31.65	35.65	36.07	37.65	39.23	51.21	56.70	58.48	62.46
Massachusetts, Boston	32.63	17.96	14.19	24.18	26.98	35.73	36.57	35.98	39.07	52.40	55.98	58.23	61.16
Michigan, Detroit	28.12	18.28	15.53	25.17	30.93	33.82	34.35	34.23	39.53	53.86	59.42	57.65	62.07
Mississippi, Jackson	-	-	-	-	32.23	35.48	37.52	34.91	38.48	52.09	54.17	57.15	62.29
Missouri, St. Louis	27.58	17.07	16.43	23.04	27.15	34.07	36.15	35.65	39.20	52.17	57.65	59.48	63.40
Montana, Great Falls	-	-	-	-	36.90	36.36	36.57	35.23	39.95	53.17	59.42	60.85	65.44
Nebraska, Omaha	27.25	20.08	17.97	26.75	32.53	37.82	37.40	37.48	40.03	53.17	59.40	63.15	66.15
New Hampshire, Manchester	32.04	21.12	16.02	24.97	30.07	36.40	38.23	37.65	40.07	54.48	56.48	59.40	62.98
New Jersey, Newark	29.88	17.12	15.78	23.18	28.32	37.40	38.07	36.32	38.57	52.30	54.73	55.65	59.40
New Mexico, Albuquerque	32.25	21.00	19.92	30.25	32.90	36.73	36.90	36.48	38.29	52.65	58.98	59.53	63.59
New York, Buffalo	30.92	18.07	16.30	26.15	27.92	36.11	36.28	37.15	40.07	55.38	58.65	61.37	64.61
New York, New York	31.92	17.36	16.11	26.50	31.40	36.93	39.18	44.56	43.73	59.75	61.15	61.81	64.31
North Carolina, Charlotte	31.33	20.94	20.32	29.37	31.03	35.32	37.36	37.31	39.32	51.99	56.76	60.42	61.95
Ohio, Cincinnati	-	-	-	-	31.40	36.65	37.90	37.90	38.65	53.36	57.19	57.23	60.65
Ohio, Cleveland	-	-	-	-	32.32	36.65	37.90	37.80	38.65	53.36	57.19	57.23	60.40
Oklahoma, Tulsa	27.75	19.25	14.58	26.75	30.48	35.07	35.07	34.73	37.53	50.33	56.44	59.46	63.74
Oregon, Portland	26.79	20.96	20.38	27.98	33.65	35.32	35.82	35.48	38.39	51.70	55.50	57.23	61.49
Pennsylvania, Philadelphia	32.00	20.58	15.49	25.19	28.48	36.48	37.23	36.74	37.90	52.88	53.90	56.73	61.40
Rhode Island, Providence	32.63	17.48	14.66	24.08	27.06	36.23	36.90	36.15	38.32	52.57	55.90	58.57	62.15
South Carolina, Charleston	29.17	20.86	20.10	28.07	30.94	34.32	35.73	36.65	38.40	52.88	54.39	57.90	61.23
Tennessee, Memphis	29.00	19.04	22.22	28.22	29.65	35.57	35.48	35.48	37.48	50.51	57.17	59.65	64.07
Texas, Dallas	-	-	-	-	29.23	32.73	33.90	33.15	34.37	47.17	53.53	56.40	59.90
Texas, El Paso	-	-	-	-	28.88	34.73	36.90	35.90	36.29	47.98	55.95	57.40	60.65
Texas, Houston	29.13	18.83	17.17	24.00	29.32	32.23	32.82	32.34	33.90	47.28	52.40	56.40	60.15
Utah, Salt Lake City	31.88	22.67	19.88	24.42	30.90	34.32	34.98	35.56	37.37	50.17	56.32	58.45	60.94
Virginia, Norfolk	30.08	19.86	20.38	27.33	31.23	35.57	35.23	36.90	39.48	52.73	56.23	60.07	63.98
Washington, Seattle	-	-	-	-	29.57	36.40	36.73	36.35	39.42	52.22	57.18	59.98	64.23
Washington, Spokane	28.92	23.83	21.92	30.63	36.73	36.40	36.57	35.95	39.07	52.72	56.68	60.13	63.87
West Virginia, Charleston	30.33	20.46	20.68	29.23	31.32	35.73	37.73	38.40	39.56	51.23	57.57	59.07	63.14
Wisconsin, Milwaukee	27.35	17.43	19.15	24.90	30.98	33.15	34.48	33.73	38.37	52.13	58.15	58.40	61.40

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(1) Regular grade gasoline at full service stations, retail price including tax.
(2) Prices prior to 1970 are for Jacksonville.
Source: Data for 1920-1950, Texaco Inc.; 1960-1977, Platt's Oilgram Price Service
Note: The list of selected cities has been changed.

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Dollars per Gallon)

	1978		1979		1980		1981		1982		1983	
Area(2)	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded
U.S. City Average	.627	.670	.857	.903	1.191	1.245	1.311	1.378	1.222	1.296	1.157	1.241
Anchorage, Alaska	.744	.767	.921	.952	1.241	1.275	1.408	1.465	1.380	1.446	1.253	1.339
Atlanta, Ga.	.624	.668	.843	.890	1.197	1.251	1.328	1.397	1.234	1.319	1.143	1.248
Baltimore Md.	.613	.666	.844	.891	1.204	1.251	1.334	1.389	1.288	1.335	1.244	1.296
Boston, Ma.	.623	.660	.857	.899	1.199	1.241	1.337	1.391	1.234	1.283	1.155	1.225
Buffalo, NY.	.644	.687	.899	.948	1.235	1.280	1.336	1.394	1.248	1.306	1.222	1.288
Chicago Ill-NW Ind.	.680	.730	.925	.979	1.246	1.304	1.344	1.410	1.264	1.321	1.223	1.298
Cincinnati, Oh-Ky-Ind.	.618	.655	.842	.882	1.154	1.206	1.275	1.345	1.217	1.293	1.187	1.257
Cleveland, Oh	.621	.665	.839	.884	1.160	1.203	1.304	1.385	1.269	1.327	1.175	1.248
Dallas-Ft Worth, Tx	.579	.617	.789	.833	1.132	1.186	1.245	1.307	1.140	1.209	1.081	1.158
Denver-Boulder, Colo.	.612	.663	.838	.886	1.150	1.217	1.259	1.330	1.197	1.273	1.091	1.197
Detroit, Mich.	.643	.696	.891	.947	1.242	1.303	1.335	1.395	1.247	1.304	1.227	1.280
Honolulu, Hawaii	.759	.764	.937	.976	1.298	1.355	1.409	1.567	1.472	1.542	1.400	1.462
Houston, Tx	.567	.613	.794	.835	1.139	1.183	1.261	1.313	1.143	1.212	1.040	1.132
Kansas City, Mo-Kn	.604	.644	.843	.886	1.137	1.190	1.237	1.298	1.195	1.262	1.155	1.226
Los Angeles, Long Beach, Anaheim, Ca.	.644	.691	.892	.943	1.213	1.271	1.337	1.409	1.232	1.318	1.166	1.215
Miami, Fla	.611	.661	.841	.892	1.186	1.235	1.319	1.389	1.257	1.364	1.207	1.326
Milwaukee, Wisc	.595	.631	.819	.864	1.139	1.198	1.273	1.329	1.245	1.286	1.190	1.224
Minneapolis, St. Paul, Minn-Wisc.	.618	.654	.860	.901	1.175	1.231	1.294	1.360	1.253	1.328	1.211	1.284
New York, NY-NE N.J.	.632	.675	.882	.927	1.241	1.286	1.355	1.413	1.249	1.319	1.181	1.257
NE Penn	.610	.650	.837	.879	1.178	1.218	1.306	1.353	1.197	1.242	1.157	1.208
Philadelphia,Pa-NJ.	.618	.658	.855	.904	1.192	1.233	1.309	1.365	1.188	1.255	1.149	1.210
Pittsburgh, Pa.	.628	.663	.857	.893	1.205	1.242	1.356	1.409	1.234	1.312	1.147	1.233
Portland, Ore-Wash	.636	.681	.870	.907	1.193	1.226	1.317	1.381	1.257	1.337	1.121	1.230
St. Louis, Mo-Ill.	.607	.656	.851	.897	1.145	1.208	1.230	1.299	1.151	1.213	1.111	1.164
San Diego, Ca.	.636	.691	.881	.932	1.215	1.280	1.323	1.408	1.240	1.339	1.157	1.253
San Fran-Oakland, Ca.	.661	.717	.899	.961	1.243	1.310	1.355	1.436	1.260	1.353	1.154	1.290
Seattle-Everett, Wash.	.650	.677	.877	.917	1.211	1.253	1.335	1.401	1.227	1.271	1.145	1.182
Washington, DC-Md-Va.	.651	.702	.853	.906	1.224	1.276	1.334	1.393	1.256	1.304	1.232	1.288
Region (3)												
Northeast	.631	.672	.870	.913	1.220	1.260	1.344	1.396	1.238	1.298	1.181	1.248
North Central	.628	.671	.861	.910	1.183	1.244	1.303	1.370	1.233	1.298	1.191	1.261
South	.611	.654	.831	.863	1.172	1.223	1.293	1.360	1.196	1.272	1.132	1.217
West	.643	.695	.879	.936	1.201	1.267	1.323	1.405	1.233	1.325	1.132	1.238

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(1) Regular grade gasoline - leaded and unleaded

(2) Area is generally the SMSA. Los Angeles, Long Beach, Anaheim is a combination of two SMSA's and N.Y.-NE N.J. and Chicago-NW Ind. are the more extensive Standard Consolidated Areas.

(3) Regions are defined as the four Census regions.

SOURCE: U.S. Bureau of Labor Statistics

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Dollars per Gallon)

	1984		1985		1986		1987	
Area(2)	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded
U.S. City Average	1.129	1.212	1.115	1.203	0.857	0.927	0.897	0.948
Anchorage, Alaska	1.204	1.294	1.180	1.237	0.950	0.997	NA	NA
Atlanta, Ga.	1.110	1.225	1.094	1.197	0.769	0.888	NA	NA
Baltimore, Md.	1.092	1.164	1.092	1.163	0.877	0.921	0.913	0.935
Boston, Ma.	1.078	1.175	1.082	1.173	0.857	0.922	0.883	0.929
Buffalo, N.Y.	1.174	1.249	1.145	1.208	0.861	0.890	NA	NA
Chicago, Ill-NW Ind.	1.206	1.284	1.176	1.258	0.912	0.953	0.969	1.004
Cincinnati, Oh-Ky-Ind.	1.153	1.218	1.090	1.149	0.812	0.853	NA	NA
Cleveland, Oh.	1.130	1.214	1.081	1.182	0.820	0.902	0.880	0.941
Dallas-Ft. Worth, Tx.	1.072	1.163	1.104	1.142	0.789	0.831	0.856	0.881
Denver-Boulder, Co.	1.049	1.164	1.056	1.155	0.788	0.873	NA	NA
Detroit, Mi.	1.236	1.278	1.173	1.264	0.833	0.944	0.859	0.972
Honolulu, Ha.	1.368	1.443	1.274	1.396	1.077	1.221	NA	NA
Houston, Tx.	1.015	1.116	1.023	1.092	0.753	0.796	0.852	0.880
Kansas City, Mo-Kn.	1.082	1.142	1.048	1.124	0.758	0.817	NA	NA
Los Angeles, Long Beach, Anaheim, Ca.	1.102	1.211	1.088	1.191	0.879	0.956	0.901	0.931
Miami, Fl.	1.126	1.215	1.115	1.205	0.895	0.953	0.949	0.983
Milwaukee, Wi.	1.147	1.202	1.129	1.197	0.857	0.899	NA	NA
Minneapolis, St. Paul, Mn-Wi.	1.171	1.223	1.174	1.247	0.902	0.965	NA	NA
New York, NY-NE N.J.	1.116	1.189	1.114	1.185	0.859	0.908	0.903	0.936
NE Pa.	1.137	1.204	1.142	1.227	0.869	0.910	NA	NA
Philadelphia, Pa-N.J.	1.141	1.213	1.113	1.164	0.869	0.880	0.891	0.895
Pittsburgh, Pa.	1.147	1.238	1.149	1.213	0.855	0.883	0.887	0.899
Portland, Or-Wa.	1.116	1.222	1.115	1.200	0.839	0.922	NA	NA
St. Louis, Mo-Ill.	1.086	1.142	1.064	1.137	0.797	0.865	0.854	0.897
San Diego, Ca.	1.162	1.212	1.119	1.248	0.876	1.004	NA	NA
San Fran-Oakland, Ca.	1.156	1.302	1.141	1.252	0.869	0.976	0.870	0.955
Seattle-Everett, Wa.	1.178	1.217	1.152	1.221	0.891	0.962	NA	NA
Washington, D.C.-Md-Va.	1.203	1.302	1.148	1.254	0.890	0.983	0.911	0.998
Region(3)								
Northeast	1.133	1.204	1.124	1.201	0.877	0.931	0.900	0.946
North Central	1.157	1.233	1.133	1.219	0.859	0.921	0.914	0.958
South	1.105	1.192	1.101	1.181	0.831	0.904	0.883	0.943
West	1.123	1.220	1.115	1.209	0.873	0.957	0.896	0.946

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(1) Regular grade gasoline--leaded and unleaded.

(2) Area is generally the SMSA. Los Angeles, Long Beach, Anaheim is a combination of two SMSA's and N.Y.-NE N.J. and Chicago-NW Ind. are the more extensive Standard Consolidated Areas.

(3) Regions are defined as the four Census Regions.

Source: U.S. Bureau of Labor Statistics

AVERAGE PRICE OF NATURAL GAS CONSUMED BY END USE SECTOR
(Dollars per Thousand Cubic Feet)

Year	Lease and Plant Fuel	Pipeline Fuel	Delivered to Consumers: Residential	Delivered to Consumers: Commercial(1)	Delivered to Consumers: Industrial	Delivered to Consumers: Electric Utilities	Delivered to Consumers: Total	Total Consumption
1967	0.15	0.20	1.04	0.74	0.34	0.28	0.57	0.53
1968	0.16	0.20	1.04	0.73	0.34	0.22	0.55	0.51
1969	0.18	0.21	1.05	0.74	0.35	0.27	0.57	0.53
1970	0.18	0.21	1.09	0.77	0.37	0.29	0.59	0.55
1971	0.19	0.22	1.15	0.82	0.41	0.32	0.63	0.59
1972	0.20	0.23	1.21	0.88	0.45	0.34	0.68	0.63
1973	0.21	0.25	1.29	0.94	0.50	0.38	0.73	0.68
1974	0.51	0.30	1.43	1.07	0.67	0.51	0.89	0.84
1975	0.47	0.40	1.71	1.35	0.96	0.77	1.19	1.12
1976	0.57	0.51	1.98	1.64	1.24	1.06	1.47	1.38
1977	0.71	0.77	2.35	2.04	1.50	1.32	1.78	1.66
1978	0.79	0.90	2.56	2.23	1.70	1.48	1.98	1.85
1979	1.06	1.32	2.98	2.73	1.99	1.81	2.34	2.21
1980	1.43	1.85	3.68	3.39	2.56	2.27	2.91	2.80
1981	1.93	2.39	4.29	4.00	3.14	2.89	3.51	3.39
1982	2.23	2.97	5.17	4.82	3.87	3.48	4.32	4.15
1983	2.54	3.15	6.06	5.59	4.18	3.58	4.82	4.64
1984	2.71	3.04	6.12	5.55	4.22	3.70	4.85	4.67
1985	2.37	2.92	6.12	5.50	3.95	3.55	4.72	4.54
1986	2.02	2.52	5.83	5.08	3.23	2.43	4.13	3.96
1987	NA	2.17	5.54	4.78	2.94	2.32	4.05	2.96

NA Not available.
(1) Includes deliveries to local, state and federal agencies engaged in non-manufacturing activities.

Source: U. S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

Section VI
Table 14

SPOT PRICES FOR SELECTED WORLD CRUDE OILS
(Mid-month--Dollars per Barrel)

Crude/Type	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1984												
Brent(1)	29.30	29.33	29.85	30.05	29.90	29.28	28.38	28.43	28.48	28.30	27.95	26.95
Dubai(2)	27.75	27.60	27.85	28.03	28.08	28.05	27.50	27.18	27.35	27.33	27.20	26.53
Forcados(3)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	28.35	28.50	28.50	29.05	28.00	27.40
ANS(4)	28.35	28.50	29.68	29.53	29.30	29.38	28.48	28.70	28.70	28.13	27.95	26.33
WTI(5)	29.73	29.73	30.73	30.73	30.55	30.08	28.83	29.23	29.28	28.83	28.33	26.35
1985												
Brent	27.05	28.30	27.75	28.00	26.40	26.25	26.30	27.10	27.20	28.15	29.60	25.85
Dubai	27.45	27.25	27.13	26.75	25.53	25.45	25.53	26.25	26.08	26.80	26.85	26.55
Forcados	27.35	28.55	28.25	28.15	26.80	26.45	26.43	27.35	27.95	28.85	30.15	26.85
ANS	25.95	28.28	28.35	28.50	26.90	25.85	26.03	27.08	27.18	27.43	29.05	25.58
WTI	25.95	27.78	28.33	29.13	27.83	27.33	27.33	28.03	27.93	29.33	30.98	27.23
1986												
Brent	23.25	17.00	13.30	12.55	14.25	12.10	9.30	14.70	14.55	13.50	15.15	15.75
Dubai	23.70	14.65	11.30	10.68	11.48	10.40	7.15	12.95	14.30	13.15	14.05	14.35
Forcados	25.85	17.35	14.10	13.35	14.68	12.00	9.05	14.45	14.30	13.10	14.50	15.80
ANS	23.95	15.15	12.73	11.85	13.93	12.05	10.30	13.98	13.53	12.93	14.43	15.23
WTI	25.18	16.03	12.73	12.68	15.68	13.68	12.05	15.83	15.08	14.38	15.68	16.13
1987												
Brent	18.83	17.40	17.88	17.58	18.80	18.75	19.80	19.20	18.30	18.75	17.95	16.95
Dubai	17.40	16.77	16.87	16.98	17.00	17.25	17.60	17.25	16.90	16.95	16.45	15.10
Forcados	18.85	17.75	17.98	17.53	18.65	18.75	19.80	19.15	18.35	18.90	18.05	16.15
ANS	18.60	17.05	17.75	17.38	18.75	18.85	20.05	19.15	18.30	18.55	17.40	14.65
WTI	19.13	17.83	18.38	17.98	19.55	19.85	21.55	20.55	19.60	19.75	18.90	16.65
1988												
Brent	16.55	15.90	14.25	16.90	16.55	15.60	14.35	14.95	13.70	13.35	13.00	
Dubai	15.25	15.10	12.90	15.00	15.00	13.75	12.45	13.05	11.90	11.15	10.35	
Forcados	16.70	15.90	14.25	16.85	16.50	15.55	14.25	14.90	13.40	13.45	13.05	
ANS	15.25	14.95	13.90	16.20	15.55	14.80	13.80	14.25	13.45	12.85	11.75	
WTI	16.90	16.75	15.65	18.25	17.50	16.55	14.85	15.55	14.90	14.90	14.20	

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(1) Brent is from the North Sea, United Kingdom.
(2) Dubai from Dubai, part of United Arab Emirates.
(3) Forcados from Nigeria.
(4) ANS (Alaskan North Slope) from the United States.
(5) WTI (West Texas Intermediate) from the United States.

Source: Platt's Oilgram Price Report.

Section VI
Table 15

HISTORICAL AVERAGE U.S. GASOLINE PRICES: 1918-1946
(Cents per Gallon)

Year	Secvice Station Price (Excluding Tax)	State and Federal Taxes	Service Station Price (Including Tax)
1918	25.12	--	25.12
1919	25.41	0.06	25.47
1920	29.74	0.09	29.83
1921	26.11	0.20	26.31
1922	24.82	0.38	25.20
1923	21.06	0.91	21.97
1924	19.47	1.48	20.95
1925	20.09	2.11	22.20
1926	20.97	2.41	23.38
1927	18.28	2.81	21.09
1928	17.90	3.04	20.94
1929	17.92	3.50	21.42
1930	16.16	3.79	19.95
1931	12.98	4.00	16.98
1932	13.30	4.63	17.93
1933	12.41	5.41	17.82
1934	13.64	5.21	18.85
1935	13.55	5.29	18.84
1936	14.10	5.35	19.45
1937	14.59	5.40	19.99
1938	14.07	5.44	19.51
1939	13.31	5.44	18.75
1940	12.75	5.66	18.41
1941	13.30	5.93	19.23
1942	14.46	5.97	20.43
1943	14.56	5.97	20.53
1944	14.62	5.97	20.59
1945	14.48	6.02	20.50
1946	14.69	6.08	20.77

Source: Texaco, Inc.

SECTION VII. DEMAND

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Section VII
Table 1

ESTIMATED WORLD DEMAND FOR REFINED PETROLEUM PRODUCTS BY AREA
(Thousands of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist(1) Nations	Total World
1950	2,392,974	118,383	262,544	2,773,901	34,683	62,244	136,628	382,750	3,390,206	N.A.	N.A.
1951	2,578,766	133,884	298,099	3,010,749	44,053	75,137	164,829	460,604	3,755,372	N.A.	N.A.
1952	2,668,134	149,244	318,351	3,135,729	51,575	71,424	184,416	504,968	3,948,112	N.A.	N.A.
1953	2,776,778	163,237	328,243	3,268,258	57,147	75,196	204,607	550,652	4,155,858	N.A.	N.A.
1954	2,833,896	180,887	355,648	3,370,431	61,114	93,833	231,493	644,159	4,401,030	N.A.	N.A.
1955	3,089,348	200,142	353,450	3,642,940	67,243	97,860	261,296	715,283	4,784,622	N.A.	N.A.
1956	3,214,651	230,435	394,541	3,839,627	67,785	105,475	386,546	836,671	5,136,104	N.A.	N.A.
1957	3,221,949	232,667	429,009	3,883,625	75,325	116,640	331,923	841,901	5,249,414	N.A.	N.A.
1958	3,327,993	241,692	487,366	4,057,051	140,515	111,666	354,485	983,139	5,646,856	N.A.	N.A.
1959	3,477,173	295,633	553,903	4,326,709	178,303	121,883	440,003	1,203,651	6,270,549	958,548	7,229,097
1960	3,585,820	306,865	581,292	4,473,977	209,473	129,494	540,687	1,407,121	6,760,752	1,058,000	7,818,752
1961	3,641,280	315,565	633,170	4,590,015	219,092	152,970	632,167	1,625,344	7,219,588	1,205,194	8,424,782
1962	3,796,029	334,661	684,935	4,815,625	241,572	157,354	716,991	1,871,923	7,803,465	1,294,308	9,097,773
1963	3,921,364	359,651	703,155	4,984,170	253,430	175,683	857,292	2,150,829	8,421,404	1,413,898	9,835,302
1964	4,034,236	383,080	742,025	5,159,341	272,513	205,091	974,790	2,449,413	9,061,148	1,512,555	10,573,703
1965	4,202,039	416,873	766,617	5,385,529	285,132	205,891	1,114,940	2,746,529	9,738,021	1,647,203	11,385,224
1966	4,410,796	439,664	823,887	5,674,347	299,697	212,655	1,247,989	3,051,357	10,486,045	1,765,111	12,251,156
1967	4,584,526	456,663	857,000	5,898,189	318,350	219,667	1,367,445	3,262,152	11,065,803	1,927,179	12,992,982
1968	4,901,789	491,813	890,839	6,284,441	341,735	258,103	1,662,915	3,644,518	12,191,712	2,060,613	14,252,325
1969	5,159,930	508,609	943,096	6,611,635	361,131	246,304	1,987,104	4,153,039	13,359,213	2,228,375	15,587,588
1970	5,364,473	542,386	978,422	6,885,281	390,398	260,538	2,258,789	4,512,974	14,307,980	2,373,670	16,681,650
1971	5,552,560	559,038	1,047,630	7,159,228	459,608	293,014	2,451,760	4,712,845	15,076,455	3,622,268	17,698,723
1972	5,990,316	591,306	1,124,200	7,705,822	467,016	319,841	2,576,352	5,068,198	16,137,229	2,607,564	18,744,793
1973	6,317,303	622,922	1,227,749	8,167,974	561,726	345,574	2,887,617	5,289,543	17,252,434	3,173,318	20,425,752
1974	6,078,239	635,142	1,276,790	7,990,171	586,216	337,707	2,848,143	4,993,599	16,755,836	3,034,212	19,790,048

N.A. Not Available
(1) Excludes Cuba

Source: 1950-1958, U.S. Bureau of Mines, World Petroleum Statistics Annual
1959-1974, U.S. Bureau of Mines, International Petroleum Annual

Section VII
Table 1a

ESTIMATED WORLD DEMAND FOR REFINED PETROLEUM PRODUCTS BY AREA
(Thousands of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist(1) Nations	Total World
1975	5,957,515	618,363	1,294,353	7,870,231	586,502	374,996	2,679,861	4,599,943	16,111,533	3,231,831	19,343,365
1976	6,390,750	638,081	1,375,019	8,403,850	619,677	393,495	2,920,933	4,922,309	17,260,264	3,915,572	21,175,836
1977	6,727,468	639,167	1,426,596	8,793,231	679,657	404,914	3,104,274	5,035,011	18,017,087	4,225,188	22,242,275
1978	6,879,017	633,868	1,517,532	9,030,417	718,118	470,978	3,226,772	5,142,458	18,588,743	4,375,505	22,964,248
1979	6,757,077	677,805	1,606,730	9,041,612	647,510	512,460	4,146,765	5,488,505	19,836,852	3,928,130	23,764,982
1980	6,242,445	712,602	1,823,046	8,778,093	713,334	533,262	3,269,112	5,060,316	18,354,117	4,715,544	22,069,661
1981	5,861,058	642,400	1,622,425	8,125,883	649,700	556,625	3,164,550	4,677,475	17,174,233	4,867,275	22,041,508
1982	5,582,938	571,225	1,702,725	7,856,888	748,250	587,650	3,038,625	4,460,300	16,691,713	4,883,700	21,575,413
1983	5,559,364	538,375	1,624,250	7,721,989	834,025	594,950	3,036,800	4,369,050	16,556,814	4,827,125	21,383,939
1984	5,755,575	521,550	1,617,720	7,894,845	788,730	596,580	3,149,430	4,423,110	16,852,695	4,838,520	21,691,215
1985	5,740,143	543,850	1,615,125	7,899,118	784,750	620,500	3,097,025	4,343,500	16,744,893	4,865,450	21,610,343
1986	5,942,429	538,375	1,653,450	8,134,254	784,750	618,675	3,208,350	4,518,700	17,264,729	4,953,050	22,217,779
1987	6,082,742	547,500	1,695,425	8,325,667	793,875	638,750	3,312,375	4,522,350	17,593,017	5,018,750	22,611,767

(1) Excludes Cuba.

Source: 1975-1979: U.S. Department of Energy, Energy Information Administration, International Energy Annual
1981-1987: U.S. Energy Information Administration, United States; Rest of World, BP Statistical Review of the World Oil Industry

Section VII
Table 2

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

Year	PRODUCTION Crude Oil	PRODUCTION Lease Condensate	PRODUCTION NGL's	Total Imports	Other Refinery Input(1)	Total New Supply	Unaccounted for Crude Oil(2)	Process. Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products
1947	5,087	(4)	362	437	2	5,888	+93	12	5,993	- 14	6,007	69	451	5,487
1948	5,520	(4)	401	514	1	6,436	+84	8	6,528	+293	6,235	84	368	5,783
1949	5,046	(4)	430	645	1	6,123	+42	2	6,167	- 8	6,175	42	327	5,806
1950	5,407	(4)	499	850	-	6,756	+98	2	6,856	- 56	6,912	51	305	6,556
1951	6,158	(4)	561	844	1	7,564	+49	7	7,620	+101	7,519	32	422	7,065
1952	6,256	(4)	611	952	1	7,820	+20	7	7,847	+108	7,739	17	432	7,290
1953	6,458	(4)	654	1,034	1	8,147	+ 9	20	8,176	+142	8,034	24	402	7,608
1954	6,342	(4)	691	1,052	1	8,086	+ 7	23	8,117	- 29	8,146	27	355	7,764
1955	6,807	(4)	771	1,248	1	8,827	+ 9	34	8,870	--	8,870	38	368	8,464
1956	7,151	(4)	800	1,436	1	9,388	+ 8	43	9,439	+179	9,260	47	430	8,783
1957	7,170	(4)	808	1,574	1	9,553	+18	42	9,613	+167	9,446	51	568	8,827
1958	6,710	(4)	808	1,700	1	9,218	N.A.	64	9,282	-140	9,422	29	276	9,117
1959	7,054	(4)	879	1,780	1	9,713	N.A.	86	9,799	+ 51	9,748	11	211	9,526
1960	7,035	(4)	929	1,815	1	9,780	N.A.	146	9,926	- 83	10,009	9	202	9,797
1961	7,183	(4)	991	1,917	-	10,091	N.A.	179	10,270	+111	10,159	9	174	9,976
1962	7,332	(4)	1,021	2,082	-	10,435	N.A.	175	10,610	+ 32	10,578	9	168	10,400
1963	7,542	(4)	1,098	2,123	-	10,763	N.A.	202	10,965	+ 3	10,962	10	208	10,743
1964	7,614	(4)	1,154	2,259	-	11,027	N.A.	219	11,246	+ 10	11,236	10	202	11,023
1965	7,804	(4)	1,210	2,468	-	11,482	N.A.	220	11,702	- 8	11,710	10	187	11,512
1966	8,295	(4)	1,284	2,573	-	12,152	N.A.	245	12,397	+104	12,293	10	198	12,084
1967	8,810	(4)	1,409	2,537	-	12,757	N.A.	292	13,049	+173	12,876	9	307	12,560
1968	8,660	436	1,504	2,840	9	13,448	+20	319	13,787	+152	13,635	11	231	13,393
1969	8,778	460	1,590	3,166	12	14,005	- 7	335	14,333	- 48	14,381	12	233	14,137
1970	9,180	457	1,660	3,419	17	14,733	-21	359	15,071	+103	14,968	12	259	14,697
1971	9,032	431	1,693	3,926	17	15,098	+41	382	15,521	+ 71	15,449	12	224	15,213
1972	8,998	443	1,744	4,741	28	15,954	+28	388	16,370	-232	16,602	13	222	16,367
1973	8,784	424	1,738	6,256	30	17,232	+ 3	453	17,688	+135	17,552	13	231	17,308
1974	8,375	399	1,688	6,112	36	16,610	-25	480	17,065	+179	16,886	13	221	16,653

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(1) Includes benzol, other hydrocarbons, and hydrogen.

(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968, prior years include adjustments where available.

(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.

(4) Separate data not available prior to 1968.

(5) Data for this year and those for subsequent years are on a 50-state basis.

Source: U.S. Bureau of Mines, Annual Petroleum Statements.

Section VII
Table 2a

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

	PRODUCTION													
Year	Crude Oil	Lease Condensate	NGL's	Total Imports	Other Refinery Input(1)	Total New Supply	Unaccounted for Crude Oil(2)	Process. Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products
1975	8,007	367	1,633	6,056	38	16,101	+17	460	16,578	+ 32	16,545	13	209	16,322
1976	7,776	355	1,608	7,313	38	17,086	+77	479	17,646	- 58	17,698	14	223	17,461
1977	7,875	370	1,618	8,787	50	18,700	- 6	524	19,218	+529	18,689	16	243	18,431(4)
1978	8,353	355	1,567	8,202	53	18,530	-57	496	18,969	-257	19,226	30	362	18,847(4)
1979	8,181	371	1,583	8,293	44	18,572	-11	527	19,088	+107	18,981	29	471	18,516(4)
1980	8,210	386	1,573	6,865	44	17,078	+34	597	17,709	+ 94	17,615	28	544	17,056(4)
1981	8,177	395	1,626	5,996	50	15,971	+83	508	16,540	-176	16,716	63	595	16,058(4)
1982	8,262	387	1,550	4,948	53	15,200	+71	531	15,660	-327	16,173	62	815	15,296
1983	8,688	(6)	1,559	4,817	53	15,117	+114	488	15,719	-169	15,972	2	739	15,231
1984	8,879	(6)	1,630	5,240	45	15,794	+185	553	16,532	+ 85	16,447	2	722	15,726
1985	8,971	(6)	1,609	4,949	55	15,584	+145	557	16,286	-220	16,506	1	781	15,726
Jan.	8,740	(6)	1,628	4,192							16,902	1	792	16,109
Feb.	9,025	(6)	1,623	3,815							16,979	1	857	16,121
Mar.	9,095	(6)	1,600	4,625							16,068	1	694	15,373
Apr.	9,043	(6)	1,582	5,208							16,237	1	764	15,472
May	9,132	(6)	1,594	5,554							16,210	1	705	15,504
Jun.	9,022	(6)	1,597	4,774							16,176	1	692	15,483
Jul.	8,949	(6)	1,568	4,724							16,110	1	675	15,434
Aug.	8,803	(6)	1,594	4,602							16,809	0	749	16,060
Sep.	8,954	(6)	1,575	4,899							15,905	0	806	15,099
Oct.	8,970	(6)	1,610	5,101							16,634	0	690	15,944
Nov.	8,902	(6)	1,660	6,063							16,539	0	1,036	15,503
Dec.	9,030	(6)	1,680	5,757							17,537	1	925	16,611
1986	8,680	(6)	1,551	6,176	58	16,465	+139	616	17,220	+152	17,068	0	785	16,283
Jan.	9,137	(6)	1,711	5,522							16,948	1	859	16,088
Feb.	9,173	(6)	1,696	4,652							17,062	0	876	16,186
Mar.	9,013	(6)	1,604	4,653							17,008	0	732	16,276
Apr.	8,864	(6)	1,523	5,376							16,795	0	850	15,945
May	8,838	(6)	1,543	6,364							16,717	0	724	15,993
Jun.	8,623	(6)	1,504	6,784							16,691	0	642	16,049
Jul.	8,660	(6)	1,507	6,890							16,992	0	685	16,307
Aug.	8,374	(6)	1,445	7,117							17,486	0	868	16,618
Sep.	8,328	(6)	1,468	7,043							16,623	0	714	15,909
Oct.	8,419	(6)	1,477	6,390							17,433	0	831	16,602
Nov.	8,412	(6)	1,569	6,547							17,042	0	821	16,221
Dec.	8,352	(6)	1,571	6,652							17,951	0	820	17,131

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(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968, prior years include adjustments where available.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Figures do not add due to independent rounding.
(5) Excludes oil imported to the strategic petroleum reserve.
(6) Included with crude oil. Separate figure is not available.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

	PRODUCTION												
Year	Crude Oil	NGL's	Total Imports(5)	Other Refinery Input(1)	Total New Supply	Un-accounted for Crude Oil(2)	Processing Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products(4)
1987	8,349	1,595	6,605	64	16,613	145	639	17,397	-32	17,429	0	764	16,665
Jan.	8,480	1,582	6,261							17,388	1	703	16,684
Feb.	8,389	1,618	5,940							17,885	0	977	16,908
Mar.	8,464	1,598	5,699							16,886	1	720	16,165
Apr.	8,498	1,590	5,854							17,394	0	870	16,524
May	8,336	1,585	5,981							16,692	0	666	16,026
Jun.	8,279	1,578	6,705							17,499	0	669	16,830
Jul.	8,251	1,582	7,512							17,793	0	680	17,113
Aug.	8,210	1,571	7,391							17,010	0	664	16,346
Sep.	8,205	1,582	7,114							17,465	0	795	16,670
Oct.	8,364	1,602	7,011							17,587	0	646	16,941
Nov.	8,397	1,637	6,971							17,080	0	737	16,343
Dec.	8,318	1,621	6,765							18,502	0	1,057	17,445
1988													
Jan.	8,245	1,569	6,833							18,115	0	891	17,224
Feb.	8,376	1,594	6,946							18,451	0	867	17,584
Mar.	8,347	1,628	6,704							18,369	0	839	17,530
Apr.	8,268	1,609	6,972							17,118	0	678	16,440
May	8,203	1,624	7,196							16,934	0	817	16,117
Jun	8,158	1,605	6,815							17,995	0	941	17,054
Jul	8,059	1,609	6,952							17,386	0	831	16,555
Aug.	8,063	1,624	7,148							18,192	0	817	17,375
Sep.	7,900	1,622	7,136							17,491	0	675	16,816

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(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Figures may not add due to independent rounding.
(5) Excludes oil imported into the strategic petroleum reserve.

Source: 1987--U.S. Energy Information Administration, Petroleum Supply Annual.
1988--U.S. Energy Information Administration, Petroleum Supply Monthlies.

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	2,306	1	2,307	92,303	- 1	2,308	130	2,178
1948	2,513	1	2,514	103,756	+32	2,482	102	2,380
1949	2,632	-	2,632	111,443	+21	2,611	108	2,503
1950	2,806	-	2,806	116,769	+14	2,792	68	2,724
1951	3,122	1	3,123	134,867	+28	3,095	110	1,985
1952	3,219	4	3,223	134,737	+ 1	3,222	99	3,123
1953	3,470	1	3,471	157,872	+64	3,407	104	3,303
1954	3,456	-	3,456	155,400	- 7	3,463	94	3,369
1955	3,764	1	3,765	165,433	+27	3,738	95	3,643
1956	3,904	4	3,908	187,271	+59	3,849	97	3,752
1957	3,940	8	3,948	196,776	+26	3,922	106	3,816
1958	3,944	38	3,982	186,760	-27	4,009	75	3,934
1959(2)	4,079	36	4,115	187,613	-	4,115	46	4,069
1960	4,160	27	4,187	194,774	+20	4,167	37	4,130
1961	4,199	29	4,228	195,830	+ 3	4,225	25	4,200
1962	4,338	38	4,376	190,138	+16	4,360	18	4,342
1963	4,452	44	4,496	190,937	+ 6	4,490	19	4,471
1964	4,539	29	4,568	193,633	+21	4,547	17	4,530
1965	4,670	27	4,697	183,058	-29	4,726	13	4,713
1966	4,911	43	4,954	194,177	+30	4,924	11	4,913
1967	5,057	42	5,099	207,980	+37	5,062	14	5,048
1968	5,301	59	5,360	211,526	+10	5,350	6	5,344
1969	5,557	62	5,619	217,392	+16	5,603	7	5,596

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(2) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 3a

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31(5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(6)
1970	5,768	67	5,835	214,348	- 8	5,843	4	5,839
1971	6,034	59	6,093	223,771	+25	6,068	5	6,063
1972	6,339	68	6,407	217,149	-18	6,425	2	6,423
1973	6,580	132	6,712	213,417	-11	6,723	5	6,718
1974	6,404	204	6,608	221,881(3)	+23	6,585	3	6,582
1975	6,558	184	6,742	238,002	+27	6,715	2	6,713
1976	6,877	131	7,008	234,272	-10	7,018	4	7,014
1977	6,982	218	7,200	257,623	+64	7,136	2	7,134
1978	7,117	190	7,307	241,002	-54	7,361	2	7,358
1979	6,889	181	7,070	239,919	- 3	7,073	--	7,073
1980	6,541	140	6,681	264,205	+66	6,615	--	6,615
1981	6,437	157	6,594	256,425(4)	-27	6,621	2	6,619
1982	6,362	197	6,559	246,935	-26	6,584	20	6,564
1983	6,365	248	6,613	225,042	-45	6,658	10	6,648
1984	6,478	299	6,777	246,307	+54	6,723	6	6,717
1985	6,441	381	6,822	225,148	-43	6,865	10	6,858
Jan.	5,943	204	6,147	236,571	+224	6,372	2	6,370
Feb.	5,937	348	6,285	227,837	+325	6,610	2	6,607
Mar.	6,096	481	6,577	221,706	+117	6,694	3	6,690
Apr.	6,369	494	6,863	217,664	+135	6,998	11	6,987
May	6,589	480	7,069	217,395	+27	7,096	8	7,088
Jun.	6,807	396	7,203	220,825	-171	7,032	7	7,025
Jul.	6,825	426	7,251	228,977	-190	7,061	18	7,043
Aug.	6,849	305	7,154	224,116	+128	7,282	4	7,277
Sep.	6,328	314	6,642	225,565	+23	6,665	6	6,658
Oct.	6,380	324	6,704	216,183	+238	6,942	19	6,924
Nov.	6,505	410	6,915	219,506	-100	6,805	17	6,790
Dec.	6,669	386	7,055	225,148	-219	6,836	18	6,818

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* Includes motor and aviation gasoline.

(3) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 228,262 thousand barrels.

(4) U.S. Department of Energy altered its stock reporting base as of January 1981. On the new basis, year-end 1980 stocks were 265,802 thousand barrels. This figure was used to compute the 1981 stock change.

(5) Includes blending components.

(6) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, P.A.D. District Supply/Disposition Annual.
1981-1985--U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 3b

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end(5) (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(6)
1986	6,784	326	7,110	235,490	+ 11	7,099	33	7,066
Jan.	6,542	332	6,874	240,680	+347	6,527	6	6,522
Feb.	6,333	334	6,667	246,139	+167	6,500	11	6,489
Mar.	6,082	224	6,306	221,219	-697	7,003	21	6,983
Apr.	6,528	291	6,819	209,801	-341	7,160	23	7,138
May	7,126	471	7,597	222,753	+447	7,150	9	7,141
Jun.	7,137	392	7,529	232,754	+267	7,262	18	7,244
Jul.	6,994	337	7,331	226,374	-187	7,518	47	7,472
Aug.	7,136	303	7,439	224,160	- 76	7,515	43	7,473
Sep.	6,956	304	7,260	236,700	+293	6,967	40	6,926
Oct.	6,646	322	6,968	225,153	-370	7,338	61	7,278
Nov.	6,917	280	7,197	232,201	+198	6,999	96	6,902
Dec.	6,982	320	7,302	235,490	+112	7,190	24	7,166
1987	6,866	384	7,250	228,770	- 15	7,266	35	7,231
Jan.	6,738	394	7,132	253,723	+533	6,598	44	6,554
Feb.	6,387	310	6,697	252,768	-143	6,840	22	6,818
Mar.	6,588	364	6,952	250,466	- 57	7,010	20	6,990
Apr.	6,867	374	7,241	243,932	-142	7,383	42	7,341
May	7,016	354	7,370	236,983	-169	7,538	48	7,490
Jun.	7,124	385	7,509	232,608	-105	7,614	46	7,568
Jul.	7,070	453	7,523	228,572	-119	7,643	33	7,610
Aug.	6,962	396	7,358	228,707	-29	7,387	19	7,368
Sep.	6,954	421	7,375	232,075	+115	7,260	30	7,230
Oct.	6,694	356	7,050	220,517	-301	7,351	21	7,330
Nov.	6,923	484	7,407	227,624	+206	7,201	32	7,169
Dec.	7,036	320	7,356	228,770	+ 29	7,326	59	7,267
1988								
Jan.	6,744	324	7,068	241,971	+358	6,710	8	6,702
Feb.	6,752	365	7,117	242,996	+ 72	7,044	18	7,026
Mar.	6,715	318	7,033	233,423	-274	7,307	18	7,290
Apr.	6,929	349	7,278	228,139	-149	7,426	18	7,408
May	6,877	418	7,295	227,775	- 34	7,330	28	7,302
Jun.	7,009	425	7,434	210,995	-495	7,929	59	7,890
Jul.	7,191	461	7,652	215,872	+134	7,518	12	7,506
Aug.	7,235	465	7,700	220,621	+146	7,554	15	7,539
Sep.	6,976	404	7,380	222,689	- 14	7,393	16	7,377

* Includes motor gasoline and aviation gasoline.
(5) Includes blending components.
(6) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR MOTOR GASOLINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31(5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1964(1)	4,399	29	4,428	185,766	+23	4,405	2	4,403
1965	4,537	27	4,564	174,717	-30	4,594	1	4,593
1966	4,798	43	4,841	186,393	+31	4,810	2	4,808
1967	4,956	42	4,998	200,055	+ 7	4,961	3	4,958
1968	5,215	59	5,274	204,496	+13	5,261	1	5,260
1969	5,484	62	5,546	211,199	+18	5,528	2	5,526
1970	5,714	67	5,781	209,255	- 5	5,786	1	5,785
1971	5,984	59	6,043	219,352	+28	6,015	1	6,014
1972	6,292	68	6,360	212,894	-18	6,378	1	6,377
1973	6,535	134	6,669	209,478	-10	6,679	4	6,675
1974	6,360	204	6,564	218,410(2)	+24	6,540	2	6,538
1975	6,520	184	6,704	234,978	+28	6,676	2	6,674
1976	6,841	130	6,971	231,387	-10	6,981	3	6,978
1977	7,033	217	7,250	257,623	+73	7,177	2	7,175
1978(4)	7,169	190	7,359	237,979	-54	7,413	1	7,412
1979(4)	7,120	181	7,301	237,200	- 1	7,302	0(3)	7,302
1980(4)	6,814	140	6,954	261,398	+66	6,888	1	6,887
1981	6,405	157	6,562	253,001	-28	6,590	2	6,588
1982	6,338	197	6,535	243,876	-25	6,560	20	6,539
1983	6,340	247	6,587	222,434	-45	6,632	10	6,622
1984	6,453	299	6,752	243,296	+54	6,698	6	6,693
1985	6,419	381	6,800	222,839	-41	6,841	10	6,831
Jan.	5,926	204	6,130	233,663	-220	6,350	2	6,348
Feb.	5,914	348	6,262	224,884	-327	6,589	2	6,587
Mar.	6,072	481	6,553	218,816	-115	6,668	3	6,664
Apr.	6,344	494	8,838	214,979	-128	6,966	11	6,956
May	6,564	480	7,044	214,875	-23	7,067	8	7,060
Jun.	6,780	396	7,176	218,344	+172	7,004	7	6,997
Jul.	6,788	426	7,214	226,471	+188	7,026	18	7,008
Aug.	6,814	305	7,119	221,583	-127	7,246	4	7,242
Sep.	6,299	314	6,613	223,098	+22	6,635	6	6,629
Oct.	6,356	324	6,680	213,853	-235	6,915	19	6,897
Nov.	6,480	410	6,890	217,013	+104	6,786	17	6,770
Dec.	6,651	386	7,037	222,839	+227	6,810	18	6,792

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(1) Data prior to 1964 is not available on a comparable basis.

(2) U.S. Bureau of Mines altered its stock reporting as of January 1975. On the new basis, year-end 1974 stocks were 224,719 thousand barrels. This figure was used to compute the 1975 stock change.

(3) Totals do not add due to independent rounding.

(4) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate, and residual product supplies. Based on this raw methodology, API has reconstructed DOE data for 1978, 1979, and 1980. The stock reporting base was also altered as of January 1981. On the new basis, year-end 1980 stocks were 263,003 thousand barrels. This figure was used to compute the 1981 stock change.

(5) Includes motor gasoline blending components.

Source: U.S. Bureau of Mines, Annual Petroleum Statements.
U.S. Department of Energy, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR MOTOR GASOLINE
(Daily Averages in Thousand of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1986	6,752	326	7,078	233,057	+ 11	7,067	33	7,034
Jan.	6,522	332	6,854	238,330	+347	6,507	6	6,502
Feb.	6,301	334	6,635	243,530	+156	6,479	11	6,469
Mar.	6,060	224	6,284	218,756	-691	6,975	21	6,955
Apr.	6,498	291	6,789	207,454	-338	7,127	23	7,105
May	7,094	471	7,565	220,502	+450	7,115	9	7,106
Jun.	7,100	392	7,492	230,480	+265	7,227	18	7,209
Jul.	6,956	337	7,293	224,028	-189	7,482	47	7,436
Aug.	7,091	303	7,394	221,586	- 83	7,477	43	7,435
Sep.	6,890	303	7,193	233,945	+289	6,904	40	6,864
Oct.	6,616	322	6,938	222,356	-372	7,312	61	7,250
Nov.	6,895	280	7,175	229,370	+200	6,975	96	6,879
Dec.	6,969	320	7,289	233,057	+122	7,167	24	7,143
1987	6,841	384	7,225	226,183	- 15	7,241	35	7,206
Jan.	6,714	393	7,107	251,111	+528	6,579	44	6,535
Feb.	6,365	309	6,674	250,082	-144	6,818	22	6,796
Mar.	6,568	364	6,932	248,050	- 51	6,984	20	6,964
Apr.	6,849	374	7,223	241,750	-133	7,356	42	7,314
May	6,991	354	7,345	234,908	-164	7,508	48	7,460
Jun.	7,089	385	7,474	230,421	-111	7,585	46	7,539
Jul.	7,042	452	7,494	226,353	-119	7,614	33	7,581
Aug.	6,932	396	7,328	226,459	- 29	7,357	19	7,338
Sep.	6,921	421	7,342	229,648	+107	7,235	30	7,205
Oct.	6,668	356	7,024	218,022	-302	7,326	21	7,305
Nov.	6,907	484	7,391	225,190	+208	7,183	32	7,151
Dec.	7,014	320	7,334	226,183	+ 24	7,310	59	7,251
1988								
Jan.	6,723	324	7,047	239,464	+361	6,687	8	6,679
Feb.	6,736	365	7,101	240,661	+ 78	7,022	18	7,004
Mar.	6,694	318	7,012	231,258	-271	7,283	18	7,265
Apr.	6,906	349	7,255	225,956	-148	7,402	18	7,384
May	6,847	415	7,262	225,644	- 34	7,297	28	7,269
Jun.	6,982	424	7,406	208,969	-490	7,897	59	7,838
Jul.	7,159	461	7,620	213,757	+135	7,485	12	7,473
Aug.	7,203	465	7,668	218,602	+142	7,526	15	7,511
Sep.	6,948	403	7,351	220,594	- 14	7,365	16	7,349

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(3) Total may not add due to independent rounding.
(5) Includes motor gasoline blending components.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals and Petroleum Supply Monthlies.

Section VII
Table 5

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	864	12	876	51,081	- 23	899	82	817
1948	1,046	7	1,053	71,429	+ 64	989	58	931
1949	941	5	946	75,207	+ 10	936	34	902
1950	1,100	7	1,107	71,948	- 10	1,117	35	1,082
1951	1,311	5	1,316	86,619	+ 29	1,287	62	1,225
1952	1,422	8	1,430	99,375	+ 35	1,395	92	1,303
1953	1,452	9	1,461	111,741	+ 35	1,426	89	1,337
1954	1,490	9	1,499	108,144	- 9	1,508	66	1,442
1955	1,656	12	1,668	111,333	+ 9	1,659	67	1,592
1956	1,825	14	1,839	133,981	+ 62	1,777	94	1,683
1957	1,838	23	1,861	149,449	+ 42	1,819	131	1,688
1958	1,734	41	1,775	125,101	- 67	1,842	52	1,790
1959(1)	1,865	48	1,913	151,164	+ 70	1,843	35	1,808
1960	1,830	35	1,865	138,455	- 34	1,899	27	1,872
1961	1,911	47	1,958	152,018	+ 37	1,921	19	1,902
1962	1,975	33	2,008	144,505	- 21	2,029	22	2,007
1963	2,098	25	2,123	156,677	+ 35	2,088	41	2,047
1964	2,031	32	2,063	155,846	- 2	2,065	15	2,050
1965	2,099	36	2,135	155,407	- 1	2,136	10	2,126
1966	2,155	38	2,193	154,096	- 4	2,197	12	2,185
1967(2)	2,207	51	2,258	159,703	+ 5	2,253	12	2,241
1968	2,299	131	2,430	173,158	+ 37	2,393	4	2,389
1969	2,326	139	2,465	171,714	- 4	2,469	3	2,466
1970	2,460	148	2,608	195,271	+ 65	2,543	3	2,540
1971	2,503	153	2,656	190,622	- 13	2,669	8	2,661
1972	2,636	181	2,817	154,319	- 99	2,916	3	2,913
1973	2,824	392	3,216	196,461	+115	3,101	9	3,092
1974	2,671	289	2,960	200,068(3)	+ 10	2,950	2	2,948

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(1) These figures and those for subsequent years are on a 50-state basis.
(2) Production and stocks at gas processing plants are included in this and subsequent years.
(3) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 223,717 thousand barrels. This figure was used to compute the 1975 stock change (Table 5a).

SOURCE: U.S. Bureau of Mines, Annual Petroleum Statements

Section VII
Table 5a

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels per Day)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (2)
1975	2,656	155	2,811	208,833	- 41	2,852	1	2,851
1976	2,925	146	3,072	185,986	- 62	3,134	1	3,133
1977	3,281	250	3,531	250,295	+178	3,353	1	3,352
1978(1)	3,171	173	3,344	216,463	- 93	3,437	3	3,435
1979(1)	3,167	197	3,364	228,729	+ 34	3,330	3	3,327
1980(1)	2,769	139	2,908	205,132	- 64	2,972	3	2,969
1981	2,623	173	2,796	191,541	- 38	2,834	5	2,829
1982	2,616	93	2,709	178,592	- 35	2,744	74	2,671
1983(3)	2,456	174	2,630	140,263	-124	2,754	64	2,690
1984	2,681	272	2,953	161,072	+ 57	2,896	51	2,845
1985	2,688	200	2,888	143,673	-48	2,936	67	2,868
Jan.	2,631	272	2,903	142,384	-603	3,506	41	3,465
Feb.	2,503	143	2,646	121,439	-748	3,394	64	3,330
Mar.	2,267	156	2,423	99,293	-714	3,137	44	3,093
Apr.	2,490	253	2,743	96,845	-82	2,825	27	2,798
May	2,686	197	2,883	104,432	+245	2,638	31	2,607
Jun.	2,647	152	2,799	109,688	+175	2,624	30	2,594
Jul.	2,646	95	2,741	115,683	+193	2,547	112	2,436
Aug.	2,592	81	2,673	113,755	-62	2,735	100	2,636
Sep.	2,594	222	2,816	117,367	+120	2,696	121	2,575
Oct.	2,902	262	3,164	123,417	+195	2,969	67	2,901
Nov.	3,103	280	3,383	139,719	+543	2,840	92	2,747
Dec.	3,175	287	3,462	143,673	+128	3,334	81	3,253
1986	2,797	347	3,044	155,097	+31	3,013	100	2,914
Jan.	2,899	325	3,224	136,490	-232	3,456	126	3,330
Feb.	2,563	169	2,732	112,402	-860	3,592	176	3,416
Mar.	2,643	217	2,860	98,811	-438	3,298	131	3,168
Apr.	2,787	147	2,934	95,907	-97	3,031	128	2,904
May	2,858	149	3,007	98,857	+95	2,912	149	2,762
Jun.	2,729	169	2,898	107,895	+301	2,597	53	2,544
Jul.	2,710	313	3,023	118,905	+355	2,668	75	2,593
Aug.	2,922	370	3,292	137,737	+607	2,685	64	2,621
Sep.	2,865	262	3,127	152,403	+489	2,638	98	2,540
Oct.	2,717	243	2,960	151,617	-25	2,985	74	2,912
Nov.	2,916	254	3,170	158,263	+222	2,948	72	2,876
Dec.	2,943	339	3,282	155,097	-102	3,384	55	3,329

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(1) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate, and residual product supplied. Based on this new methodology, API has reconstructed DOE data for 1978, 1979, and 1980.

(2) Totals may not add due to independent rounding.

(3) In 1983, DOE changed their methodology for calculating stocks. The 1983 stock change is based on DOE's revised stock figures for 1982.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1987	2,730	255	2,985	134,485	- 56	3,042	66	2,976
Jan.	2,760	222	2,982	141,342	-444	3,426	115	3,310
Feb.	2,556	253	2,809	123,730	-629	3,438	93	3,345
Mar.	2,422	297	2,719	109,332	-464	3,183	67	3,116
Apr.	2,552	192	2,744	100,338	-300	3,044	53	2,991
May	2,563	203	2,766	101,286	+31	2,735	51	2,684
Jun.	2,689	265	2,954	104,391	+104	2,850	61	2,790
Jul.	2,700	381	3,081	114,602	+329	2,752	38	2,713
Aug.	2,705	222	2,927	124,735	+327	2,600	47	2,553
Sep.	2,748	222	2,970	126,762	+68	2,902	64	2,838
Oct.	2,780	237	3,017	120.974	-187	3,204	53	3,151
Nov.	3,036	187	3,223	128,004	+234	2,989	56	2,932
Dec.	3,241	378	3,619	134,485	+209	3,410	92	3,318
1988								
Jan.	3,007	355	3,362	127,155	-236	3,599	82	3,517
Feb.	2,683	330	3,013	109,640	-604	3,618	107	3,511
Mar.	2,720	243	2,963	89,312	-656	3,619	74	3,544
Apr.	2,870	208	3,078	94,290	+166	2,912	42	2,870
May	2,930	228	3,158	104,452	+328	2,831	74	2,757
Jun.	2,893	209	3,102	110,662	+207	2,895	76	2,820
Jul.	2,782	205	2,987	119,434	+283	2,705	58	2,647
Aug.	2,844	270	3,114	125,185	+186	2,930	70	2,860
Sep.	2,779	292	3,071	130,976	+193	2,878	72	2,806

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 6

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	1,301	149	1,450	47,091	--	1,450	29	1,421
1948	1,329	146	1,475	64,021	+72	1,403	36	1,367
1949	1,177	206	1,383	60,193	-11	1,394	35	1,359
1950	1,180	329	1,509	40,750	-53	1,562	45	1,517
1951	1,302	327	1,629	42,853	+ 3	1,626	80	1,546
1952	1,257	351	1,608	48,706	+16	1,592	76	1,516
1953	1,248	360	1,608	49,370	+ 2	1,606	71	1,535
1954	1,158	354	1,512	52,105	+ 8	1,504	73	1,431
1955	1,166	417	1,583	39,174	-36	1,619	93	1,526
1956	1,183	445	1,628	44,491	+15	1,613	76	1,537
1957	1,176	475	1,651	59,959	+42	1,609	105	1,504
1958	1,025	499	1,524	59,508	- 1	1,525	70	1,455
1959(1)	973	610	1,583	53,501	-18	1,601	57	1,544
1960	918	637	1,555	44,870	-24	1,579	51	1,528
1961	875	667	1,542	44,869	--	1,542	39	1,503
1962	820	724	1,544	49,996	+14	1,530	35	1,495
1963	765	747	1,512	47,538	- 6	1,518	42	1,476
1964	739	808	1,547	40,403	-20	1,567	52	1,515
1965	746	946	1,692	56,214	+43	1,649	41	1,608
1966	733	1,032	1,765	61,196	+14	1,751	35	1,716
1967	766	1,085	1,851	65,597	+ 5	1,846	60	1,786
1968	765	1,120	1,885	67,359	+ 5	1,880	54	1,826
1969	740	1,265	2,005	58,395	-19	2,024	46	1,978
1970	718	1,528	2,246	53,994	-12	2,258	54	2,204
1971	765	1,583	2,348	59,681	+16	2,332	36	2,296
1972	808	1,742	2,550	55,216	-12	2,562	33	2,529
1973	988	1,853	2,841	53,480	- 5	2,846	23	2,823
1974	1,083	1,587	2,670	59,694(2)	+17	2,653	14	2,639

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(1) These figures and those for subsequent years are on a 50 state basis.

(2) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 74,939 thousand barrels. This figure was used to compute the 1975 stock change (Table 7a)

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks as of Dec. 31 (thousands of barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1975	1,251	1,223	2,474	74,126	- 2	2,476	15	2,461
1976	1,393	1,413	2,806	72,344	- 5	2,811	12	2,799
1977	1,767	1,359	3,126	89,993	+49	3,077	6	3,071
1978(1)	1,681	1,355	3,036	90,194	+ 1	3,037	13	3,024
1979(1)	1,708	1,151	2,859	95,598	+15	2,844	9	2,835
1980(1)	1,660	920	2,580	90,344	-14	2,594	33	2,561
1981	1,369	800	2,169	77,992	-37	2,206	118	2,088
1982	1,118	776	1,894	66,200	-32	1,926	209	1,716
1983(2)	852	699	1,551	48,504	-55	1,606	185	1,421
1984	891	681	1,572	53,000	+12	1,560	190	1,369
1985	882	510	1,392	50,381	-7	1,399	197	1,202
Jan.	1,004	568	1,572	46,201	-219	1,791	312	1,480
Feb.	1,040	580	1,620	45,053	-41	1,661	295	1,366
Mar.	963	477	1,440	46,127	+35	1,405	216	1,190
Apr.	912	383	1,295	46,195	+2	1,293	167	1,126
May	793	394	1,187	41,397	-155	1,342	185	1,156
Jun.	702	400	1,102	39,622	-59	1,161	118	1,043
Jul.	732	437	1,169	40,507	+29	1,140	83	1,058
Aug.	742	424	1,166	37,164	-108	1,274	106	1,168
Sep.	808	617	1,425	43,359	+207	1,218	188	1,031
Oct.	912	541	1,453	50,418	+228	1,225	184	1,041
Nov.	932	627	1,559	50,263	-5	1,564	275	1,290
Dec.	1,055	681	1,736	50,381	+4	1,732	250	1,483
1986	889	669	1,558	47,437	-8	1,566	147	1,418
Jan.	940	622	1,562	48,655	-56	1,618	211	1,407
Feb.	856	604	1,460	43,048	-200	1,660	183	1,478
Mar.	813	626	1,439	39,709	-108	1,547	113	1,435
Apr.	933	545	1,478	35,910	-127	1,605	202	1,402
May	913	675	1,588	39,431	+114	1,474	129	1,345
Jun.	818	712	1,530	42,767	+111	1,419	43	1,377
Jul.	850	673	1,523	40,333	-75	1,598	90	1,508
Aug.	896	793	1,689	41,346	-29	1,660	174	1,485
Sep.	854	641	1,495	44,006	+89	1,406	110	1,296
Oct.	827	635	1,462	45,822	+59	1,403	144	1,259
Nov.	975	574	1,549	46,275	+15	1,534	143	1,391
Dec.	987	913	1,900	47,437	+37	1,863	224	1,638

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(1) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate and residual product supplied. Based on this new methodology, API has reconstructed DOE data for 1978, 1979, and 1980.

(2) In 1983, the Department of Energy changed their methodology for calculating stocks. The 1983 stock change is based on DOE's revised figure for 1982.

(3) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 6b

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks at month-end (Thousands of Barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1987	885	565	1,450	47,410	--	1,450	186	1,264
Jan.	920	701	1,621	44,931	-81	1,702	198	1,504
Feb.	825	668	1,493	38,140	-243	1,736	221	1,515
Mar.	863	559	1,422	39,303	+38	1,384	150	1,234
Apr.	831	476	1,307	35,890	-114	1,421	239	1,182
May	813	505	1,318	40,371	+145	1,173	144	1,029
Jun.	864	481	1,345	41,356	+33	1,312	105	1,207
Jul.	901	721	1,622	44,694	+108	1,514	175	1,339
Aug.	882	512	1,394	45,690	+32	1,362	185	1,176
Sep.	904	526	1,430	44,417	-42	1,472	177	1,296
Oct.	887	414	1,301	45,619	+39	1,262	194	1,069
Nov.	928	568	1,496	49,975	+145	1,351	146	1,205
Dec.	1,001	650	1,651	47,410	-83	1,734	300	1,434
1988								
Jan.	1,009	737	1,746	46,628	-23	1,768	190	1,578
Feb.	997	792	1,789	45,465	-40	1,830	229	1,601
Mar.	944	610	1,554	44,057	-45	1,599	165	1,434
Apr.	951	465	1,416	43,245	-27	1,442	170	1,272
May	866	423	1,289	45,746	+81	1,208	263	945
Jun.	881	349	1,230	42,123	-121	1,351	249	1,102
Jul.	913	436	1,349	41,072	-34	1,383	206	1,177
Aug.	863	515	1,378	37,840	-104	1,483	225	1,258
Sep.	859	566	1,425	44,220	+213	1,212	100	1,112

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 7

DELIVERIES OF DISTILLATE AND RESIDUAL FUEL OIL TO ELECTRIC UTILITIES
(Thousands of Barrels per Day)

Year	Distillate	Residual	Total	Total Fuel Oil Demand, All Sectors
1947	39	167	206	2,238
1948	41	155	196	2,298
1949	34	219	253	2,261
1950	36	255	291	2,599
1951	26	193	219	2,771
1952	23	192	215	2,819
1953	19	234	253	2,872
1954	17	194	211	2,873
1955	16	208	224	3,118
1956	15	202	217	3,220
1957	15	210	225	3,192
1958	15	211	226	3,245
1959(1)	14	225	239	3,352
1960(2)	13	233	246	3,400
1961	11	241	252	3,405
1962	11	242	253	3,502
1963	11	251	262	3,523
1964	10	267	277	3,565
1965	10	315	235	3,734
1966	10	378	388	3,901
1967	8	434	442(3)	4,027
1968	23(4)	505	528	3,215
1969	33	679	712	4,444
1970	68	856	924	4,744
1971	97	1,019	1,116	4,957
1972	187(5)	1,189	1,376	5,442
1973	214(5)	1,396	1,610	5,915
1974	232(5)	1,302	1,534	5,587
1975	174(5)	1,246	1,420	5,312
1976	165(5)	1,351	1,510	5,961
1977	210(5)	1,560	1,770	6,441
1978	211(5)	1,461	1,672	6,467
1979	128	1,333	1,461	6,162

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(1) These data include Alaska but not Hawaii.
(2) These data and those for subsequent years are on a 50-state basis.
(3) Electric public utility power plants only.
(4) These data and those for subsequent years include distillate sales for gas turbine plants.
(5) Includes kerosine jet fuel; 1972--24,000 bbls. per day; 1973--17,000 bbls. per day; 1974--14,000 bbls. per day; 1975--9,000 bbls. per day; 1976--11,600 bbls. per day; 1977--17,419 bbls. per day; 1978--12,342 bbls. per day.

Source: Energy Information Administration, Sales of Fuel Oil and Kerosine, Annuals
1979 -- Energy Information Administration, Petroleum Supply Annual.

Section VII
Table 7a

DELIVERIES OF DISTILLATE AND RESIDUAL FUEL OIL TO ELECTRIC UTILITIES
(Thousands of Barrels per Day)

Year	Distillate	Residual	Total	Total Fuel Oil Demand, All Sectors
1980	87	1,066	1,153	5,531
1981	50	892	942	4,916
1982	33	623	656	4,387
1983	32	560	592	4,111
1984	45	509	554	4,214
1985	34	403	437	4,070
1986	40	590	630	4,333
1987	42	498	540	4,241

Source: 1980-1983: U.S. Energy Information Administration, Petroleum Supply Annuals
1984-1987: U.S. Energy Information Administration, Petroleum Marketing Monthly

Section VII
Table 8

MOTOR GASOLINE CONSUMPTION IN THE UNITED STATES
(Thousands of Gallons)

STATE	1962(1)	1963	1964	1965	1966	1967	1968	1969	1970
AL	1,067,093	1,108,056	1,173,601	1,225,510	1,289,379	1,336,173	1,418,671	1,497,778	1,576,614
AK	49,644	51,577	56,075	63,788	64,478	68,157	77,905	86,603	90,489
AZ	558,562	586,726	617,131	634,772	672,134	695,160	753,141	867,887	933,764
AR	665,031	696,979	729,755	760,282	790,413	822,045	870,295	919,093	957,861
CA	6,174,317	6,525,421	6,914,444	7,180,701	7,534,489	7,776,952	8,246,668	8,659,571	9,058,684
CO	734,160	757,265	788,491	816,177	849,421	884,608	957,039	1,020,840	1,109,271
CT	842,550	879,170	922,774	962,330	1,005,351	1,038,161	1,103,268	1,155,227	1,213,358
DE	195,355	205,954	206,598	215,135	224,394	227,476	237,703	250,885	266,966
DC	210,702	201,356	212,799	220,886	224,211	221,691	225,427	229,067	229,850
FL	1,915,904	2,006,222	2,126,210	2,243,581	2,385,233	2,515,867	2,748,550	2,994,281	3,232,450
GA	1,404,674	1,465,671	1,563,737	1,655,099	1,744,907	1,840,233	1,996,264	2,161,759	2,295,682
HI	151,197	152,457	160,106	169,841	177,491	181,998	200,126	213,780	221,973
ID	294,826	297,597	308,333	321,015	329,895	343,979	363,990	379,479	400,735
IL	3,277,932	3,382,046	3,506,222	3,638,663	3,819,091	3,879,185	4,160,075	4,312,652	4,408,829
IN	1,840,861	1,890,093	1,956,911	2,037,715	2,125,426	2,169,585	2,311,357	2,410,523	2,508,880
IA	1,206,366	1,243,196	1,264,294	1,295,595	1,372,526	1,422,541	1,458,129	1,499,697	1,516,878
KS	1,023,636	1,039,657	1,052,216	1,075,559	1,098,771	1,128,343	1,261,616	1,340,894	1,345,014
KY	957,804	996,318	1,041,346	1,092,893	1,145,238	1,216,404	1,288,696	1,362,736	1,438,058
LA	977,677	1,012,696	1,083,154	1,154,384	1,226,382	1,279,173	1,360,715	1,420,327	1,482,761
ME	346,745	354,350	368,636	382,716	394,953	405,061	426,000	442,582	465,138
MD	987,408	1,047,240	1,098,212	1,143,315	1,220,169	1,277,344	1,366,279	1,466,184	1,569,266
MA	1,490,870	1,533,611	1,592,022	1,651,647	1,712,057	1,766,218	1,873,028	1,954,415	2,078,906
MI	2,792,967	2,930,105	3,018,362	3,183,006	3,342,442	3,415,709	3,648,173	3,839,650	4,013,072
MN	1,372,457	1,415,974	1,451,934	1,495,423	1,572,099	1,610,761	1,707,502	1,798,954	1,879,177
MS	707,872	738,301	767,988	794,987	847,672	886,319	937,310	1,000,175	1,046,335
MO	1,722,913	1,773,359	1,838,699	1,893,743	1,983,408	2,036,025	2,147,273	2,270,371	2,373,032
MT	309,869	309,609	313,450	327,979	334,344	342,289	361,060	371,950	395,762
NE	633,965	655,102	676,866	690,018	718,456	733,607	762,982	799,783	814,936
NV	184,637	205,360	218,989	233,702	242,024	257,239	264,295	285,519	314,702
NH	212,076	221,306	233,389	244,485	262,392	275,998	300,730	322,299	346,298
NJ	2,045,680	2,148,500	2,222,915	2,322,560	2,391,674	2,447,834	2,594,999	2,676,054	2,802,641
NM	407,899	426,085	441,606	453,980	467,035	474,859	497,657	531,471	556,157
NY	4,068,568	4,198,606	4,405,589	4,549,269	4,730,616	4,865,488	5,027,115	5,454,249	5,506,910
NC	1,565,360	1,645,046	1,745,346	1,809,559	1,912,416	2,015,089	2,122,010	2,266,828	2,378,383
ND	321,951	331,251	342,523	347,480	346,264	345,032	357,520	374,952	380,364
OH	3,305,508	3,359,222	3,523,939	3,657,408	3,830,041	3,934,925	4,168,373	4,383,205	4,574,876
OK	983,966	1,008,420	1,049,671	1,077,090	1,135,940	1,171,121	1,235,953	1,300,609	1,372,638
OR	721,548	748,510	793,407	835,390	872,869	900,083	943,803	995,103	1,056,737
PA	3,300,176	3,369,210	3,492,876	3,599,184	3,695,541	3,849,853	4,030,622	4,170,261	4,347,667
RI	251,973	260,575	266,247	274,284	284,659	291,723	309,467	319,424	377,754
SC	773,812	805,150	839,056	888,535	944,289	988,231	1,074,726	1,136,709	1,209,516
SD	369,744	374,564	372,471	378,889	386,384	391,196	406,324	410,698	420,859
TN	1,200,616	1,245,849	1,324,458	1,370,742	1,463,854	1,545,576	1,609,233	1,721,094	1,792,235
TX	3,974,184	4,150,126	4,358,915	4,525,707	4,743,477	4,923,595	5,328,563	5,670,785	6,004,582
UT	344,939	358,369	369,398	382,693	402,191	414,702	450,967	478,390	511,959
VT	139,741	144,851	149,730	158,593	168,816	180,781	190,219	199,412	213,786
VA	1,332,670	1,345,478	1,410,858	1,479,876	1,544,631	1,599,174	1,693,865	1,790,109	1,900,620
WA	1,040,286	1,048,248	1,090,828	1,142,082	1,232,598	1,313,146	1,404,704	1,477,305	1,534,060
WV	494,792	507,715	520,633	540,240	569,235	590,460	630,982	652,414	691,539
WI	1,391,608	1,430,350	1,486,187	1,541,094	1,605,982	1,646,387	1,754,061	1,848,476	1,940,575
WY	186,282	190,205	194,451	197,524	201,114	205,770	221,582	233,411	246,667
TOT	62,531,373	64,779,104	67,663,848	70,337,126	73,686,872	76,139,326	80,867,012	85,415,920	89,405,266

(1) Prior to 1962 data not available on a comparable basis.
Source: U.S. Energy Information Administraton, Natural Gas Annuals
Note: The gallonage shown above represents consumption of motor gasoline, excluding sales to U.S. Government and sales of aviation gasoline.

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1971	1972	1973	1974	1975	1976	1977	1978
AL	1,678,986	1,796,381	1,886,499	1,862,659	1,918,203	2,028,878	2,098,979	2,181,179
AK	92,064	111,594	123,995	163,070	193,725	214,140	204,006	209,118
AZ	998,011	1,094,225	1,201,122	1,147,782	1,191,998	1,250,917	1,325,630	1,405,574
AR	1,021,845	1,113,419	1,164,993	1,152,195	1,185,649	1,256,990	1,288,316	1,330,318
CA	9,363,091	9,995,752	10,307,287	9,887,993	10,166,056	10,684,270	11,242,281	11,754,669
CO	1,187,015	1,295,516	1,356,428	1,301,967	1,319,754	1,442,502	1,503,396	1,594,712
CT	1,261,342	1,309,281	1,324,085	1,327,308	1,351,553	1,393,196	1,417,026	1,432,855
DE	278,240	289,802	305,316	296,489	303,545	315,973	314,070	313,277
DC	232,950	232,422	248,626	240,457	243,215	229,031	225,434	221,831
FL	3,490,217	3,899,403	4,316,798	4,205,193	4,345,632	4,507,541	4,668,677	4,929,713
GA	2,466,166	2,679,515	2,830,556	2,739,639	2,773,264	2,913,600	3,002,467	3,114,628
HI	240,160	252,963	262,887	277,849	289,772	303,836	320,804	332,512
ID	421,403	451,315	468,321	457,785	482,462	520,640	530,225	563,708
IL	4,596,788	4,836,883	5,048,307	5,024,751	5,127,189	5,327,380	5,423,741	5,565,912
IN	2,590,540	2,740,984	2,846,485	2,739,043	2,762,822	2,801,466	2,911,250	3,017,500
IA	1,599,492	1,653,457	1,797,666	1,647,054	1,766,383	1,729,960	1,753,578	1,780,537
KS	1,339,516	1,428,354	1,377,262	1,329,122	1,378,773	1,462,585	1,433,106	1,504,662
KY	1,533,258	1,625,619	1,696,508	1,676,588	1,743,523	1,840,476	1,889,170	1,941,387
LA	1,538,410	1,685,138	1,744,770	1,756,343	1,830,011	1,986,865	2,076,160	2,157,919
ME	489,231	517,865	533,231	520,051	536,015	567,427	575,775	586,048
MD	1,664,565	1,775,394	1,840,506	1,789,440	1,880,724	1,962,715	2,027,804	2,065,378
MA	2,144,361	2,276,322	2,347,441	2,296,921	2,313,488	2,398,788	2,430,633	2,465,719
MI	4,268,082	4,537,187	4,748,355	4,565,132	4,630,247	4,885,908	4,950,597	5,010,304
MN	1,969,765	2,061,019	2,117,580	2,034,085	2,089,531	2,173,006	2,228,329	2,322,812
MS	1,103,053	1,202,673	1,234,423	1,195,373	1,192,595	1,254,446	1,322,865	1,332,417
MO	2,520,133	2,645,694	2,715,190	2,628,598	2,668,731	2,802,102	2,870,104	2,946,521
MT	425,158	427,048	440,456	448,019	461,411	493,245	511,714	531,445
NE	852,453	883,983	902,846	868,296	880,948	939,870	939,626	958,879
NV	333,806	365,954	389,776	382,610	409,496	434,031	464,832	509,705
NH	368,844	390,596	401,937	390,559	401,243	426,860	444,560	456,391
NJ	2,914,276	3,170,170	3,245,118	3,174,698	3,282,821	3,402,353	3,448,987	3,524,059
NM	603,704	646,830	686,811	683,532	708,455	760,885	779,366	821,722
NY	5,833,093	6,026,795	6,258,799	5,997,859	6,063,476	6,281,127	6,202,584	6,286,240
NC	2,497,823	2,713,709	2,813,722	2,820,286	2,864,661	3,012,863	3,123,577	3,259,167
ND	383,587	422,587	429,026	411,328	433,296	452,728	452,771	467,847
OH	4,695,627	4,960,046	5,194,284	5,006,097	5,095,243	5,273,960	5,445,906	5,510,753
OK	1,436,814	1,516,097	1,599,001	1,675,497	1,743,196	1,832,255	1,881,335	1,984,458
OR	1,116,118	1,191,714	1,239,689	1,187,671	1,224,276	1,310,983	1,369,886	1,441,886
PA	4,458,007	4,768,816	4,836,463	4,813,878	4,598,530	5,006,020	5,119,281	5,219,001
RI	392,111	401,314	407,135	371,740	395,532	384,525	405,832	412,404
SC	1,315,582	1,398,217	1,466,738	1,456,658	1,506,212	1,599,507	1,636,136	1,724,697
SD	439,796	464,493	474,646	456,444	501,055	474,182	489,910	497,196
TN	1,922,133	2,103,575	2,266,089	2,181,836	2,367,877	2,479,795	2,554,604	2,664,299
TX	6,464,768	6,888,155	7,350,539	7,099,280	7,535,342	8,077,479	8,496,289	8,737,658
UT	544,925	594,731	616,731	616,419	646,942	680,027	714,148	761,968
VT	226,536	242,597	245,662	235,325	240,270	255,094	260,155	269,204
VA	2,028,516	2,164,688	2,474,181	2,441,443	2,511,736	2,662,471	2,752,404	2,861,327
WA	1,577,951	1,647,546	1,716,314	1,666,944	1,741,625	1,863,713	1,954,975	2,052,403
WV	717,015	734,827	778,331	766,439	813,024	872,009	900,930	909,773
WI	2,013,424	2,146,830	2,208,977	2,145,544	2,197,391	2,299,086	2,356,462	2,448,434
WY	256,601	279,080	293,571	294,460	319,042	343,229	361,399	388,681
TOT	93,907,352	100,068,575	104,579,479	101,855,749	104,516,610	109,873,935	113,102,038	116,780,787

Source: Federal Highway Administration, "Monthly Motor Fuel Reported by States"
Note: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1979	1980	1981	1982	1983	1984	1985
Alabama	2,093,703	1,962,046	1,849,225	1,840,396	1,861,406	1,905,267	1,881,466
Alaska	219,472	201,373	212,804	235,112	221,229	248,993	267,709
Arizona	1,412,930	1,328,722	1,344,438	1,341,613	1,410,904	1,489,965	1,555,905
Arkansas	1,269,750	1,178,800	1,137,998	1,123,466	1,128,357	1,193,067	1,166,202
California	11,515,926	10,992,050	10,842,862	10,660,534	11,032,662	11,413,578	11,656,251
Colorado	1,554,521	1,503,288	1,506,429	1,513,235	1,560,776	1,514,511	1,558,918
Connecticut	1,372,667	1,327,582	1,296,048	1,284,966	1,308,077	1,339,766	1,393,470
Delaware	306,489	293,851	290.581	282,463	308,772	320,247	326,204
Dist. of Col.	214,782	171,451	171,082	170,518	168,019	181,199	163,074
Florida	4,905,642	4,810,520	4,845,057	4,900,197	5,078,234	5,261,730	5,462,027
Georgia	3,022,565	2,874,923	2,809,969	2,818,366	2,904,369	3,053,861	3,148,673
Hawaii	332,490	354,529	347,848	349,098	355,332	371,084	349,709
Idaho	538,740	488,333	471,054	456,063	459,377	458,332	463,502
Illinois	5,186,151	4,816,780	4,598,012	4,522,361	4,609,320	4,733,589	4,836,654
Indiana	2,897,500	2,686,146	2,616,773	2,431,388	2,479,277	2,934,238	2,559,430
Iowa	1,718,515	1,561,192	1,474,522	1,420,817	1,394,722	1,398,211	1,369,838
Kansas	1,406,812	1,310,568	1,268,609	1,236,159	1,240,248	1,245,120	1,234,260
Kentucky	1,868,006	1,755,397	1,729,135	1,721,620	1,734,296	1,764,567	1,736,511
Louisiana	2,158,327	2,081,328	2,103,397	2,145,094	2,151,035	2,166,617	2,132,374
Maine	541,664	517,014	497,749	505,620	519,891	530,799	548,083
Maryland	1,950,162	1,941,209	1,919,423	1,888,873	1,892,434	1,959,267	1,976,290
Massachusetts	2,411,996	2,301,675	2,249,956	2,235,986	2,266,746	2,340,189	2,388,603
Michigan	4,756,597	4,274,036	4,014,363	3,795,814	3,680,884	4,042,348	4,086,109
Minnesota	2,221,623	2,045,270	1,984,982	1,931,205	1,985,492	2,084,655	2,136,370
Mississippi	1,292,209	1,194,845	1,208,384	1,151,872	1,158,134	1,191,027	1,231,066
Missouri	2,786,256	2,602,627	2,528,616	2,494,373	2,536,042	2,601,207	2,614,239
Montana	499,397	459,950	445,641	452,371	459,851	455,738	441,744
Nebraska	907,383	816,426	798,518	792,579	776,930	780,071	777,136
Nevada	500,916	500,286	508,535	490,270	489,835	504,530	509,110
New Hampshire	433,556	411,214	398,692	393,276	405,203	434,424	446,902
New Jersey	3,367,400	3,260,992	3,150,798	3,172,525	3,371,871	3,358,178	3,311,078
New Mexico	793,452	746,655	742,486	744,599	740,916	764,343	783,404
New York	5,871,929	5,672,549	5,674,946	5,617,353	5,491,074	6,148,506	5,941,935
North Carolina	3,129,488	2,932,274	2,874,700	2,842,968	2,911,221	3,042,021	3,092,963
North Dakota	443,692	407,250	408,449	403,067	390,085	390,514	385,715
Ohio	5,356,650	4,982,574	4,766,658	4,561,134	4,634,793	4,744,494	4,739,030
Oklahoma	1,897,821	1,845,259	1,922,403	1,929,207	1,907,622	1,877,793	1,890,867
Oregon	1,385,047	1,330,612	1,271,001	1,211,110	1,222,903	1,263,213	1,254,669
Pennsylvania	5,041,809	4,700,328	4,474,475	4,384,130	4,370,547	4,422,335	4,429,756
Rhode Island	397,229	381,826	368,524	360,833	365,634	369,612	379,026
South Carolina	1,657,831	1,554,787	1,529,196	1,515,808	1,539,188	1,601,942	1,630,720
South Dakota	458,549	423,517	403,635	393,021	389,287	389,407	387,453
Tennessee	2,528,233	2.417,939	2,388,466	2,355,395	2,331,655	2,501,396	2,534,948
Texas	8,710,656	8,106,499	8,149,252	8,201,687	8,393,680	8,501,979	8,899,228
Utah	730,529	734,992	768,450	734,020	725,317	854,992	755,798
Vermont	252,404	238,842	234,114	236,905	242,056	252,093	252,812
Virginia	2,739,763	2,599,199	2,530,673	2,493,638	2,554,245	2,665,515	2,719,453
Washington	1,996,081	1,882,513	1,872,364	1,851,127	1,919,152	2,000,333	1,912,436
West Virginia	888,849	845,242	804,632	810,848	801,736	800,672	801,431
Wisconsin	2,352,463	2,177,363	2,067,800	1,982,060	2,011,843	2,022,610	2,022,990
Wyoming	381,674	373,723	375,068	359,425	338,752	358,077	332,978
Total	112,678,296	106,378,366	104,248,792	102,747,065	104,231,431	108,248,222	108,876,519

NOTE: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

Source: Department of Transportation, Federal Highway Administration, Highway Statistics (Annual) Table MF-33GA.

Section VII
Table 8c

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1986	1987
Alabama	2,012,114	2,084,218
Alaska	256,534	242,578
Arizona	1,635,083	1,683,355
Arkansas	1,212,035	1,241,796
California	12,175,654	12,543,126
Colorado	1,592,000	1,565,700
Connecticut	1,443,603	1,484,832
Delaware	333,247	338,285
Dist. of Col.	167,549	181,371
Florida	5,690,765	5,914,696
Georgia	3,313,314	3,421,117
Hawaii	364,615	384,958
Idaho	469,394	462,202
Illinois	4,731,675	4,772,357
Indiana	2,622,218	2,745,535
Iowa	1,367,462	1,369,770
Kansas	1,248,854	1,265,349
Kentucky	1,850,343	1,855,460
Louisiana	2,160,554	2,062,830
Maine	582,048	606,596
Maryland	2,027,743	2,068,369
Massachusetts	2,458,079	2,491,662
Michigan	4,187,028	4,287,736
Minnesota	2,040,806	2,033,108
Mississippi	1,261,173	1,270,055
Missouri	2,762,114	2,732,602
Montana	443,446	440,858
Nebraska	776,830	776,125
Nevada	535,099	567,686
New Hampshire	481,789	514,167
New Jersey	3,524,601	3,586,002
New Mexico	800,775	812,713
New York	5,957,386	6,168,884
North Carolina	3,227,688	3,318,096
North Dakota	376,068	381,284
Ohio	4,878,206	5,012,222
Oklahoma	1,848,704	1,772,817
Oregon	1,294,515	1,312,919
Pennsylvania	4,523,848	4,589,684
Rhude Island	394,173	396,573
South Carolina	1,700,307	1,680,761
South Dakota	394,961	392,527
Tennessee	2,651,534	2,754,514
Texas	9,085,634	8,856,890
Utah	766,726	764,441
Vermont	259,631	282,232
Virginia	2,815,511	2,993,746
Washington	2,034,097	2,207,253
West Virginia	806,401	829,349
Wisconsin	2,061,116	2,046,604
Wyoming	328,877	313,409
TOTAL	111,933,927	113,930,521

NOTE: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

Source: Department of Transportation, Federal Highway Administration, Table MF-33GA.

U.S. SALES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
AL	1,937	2,493	2,340	2,692	2,846	3,073	3,186	3,508	3,914	4,277	4,326	4,346	4,891	5,370
AK	--	--	--	--	--	--	--	--	--	--	--	--	2,618	2,616
AZ	1,173	1,342	1,021	1,020	1,233	1,341	1,329	1,279	1,073	1,716	1,742	2,018	2,100	2,774
AR	1,733	1,838	2,162	2,414	2,244	2,325	2,222	2,136	2,357	2,558	2,575	2,433	2,175	2,052
CA	20,481	22,573	21,232	19,212	22,031	23,875	24,063	23,812	23,873	24,643	24,613	24,884	26,357	26,697
CO	1,724	1,976	1,683	1,831	2,036	2,503	2,732	3,108	3,371	3,532	3,585	3,238	3,099	4,225
CT	8,635	10,487	9,510	11,067	11,777	12,286	12,520	14,928	16,071	18,490	18,574	23,885	22,176	23,230
DE	783	866	1,013	1,285	1,556	1,702	1,861	2,365	2,677	3,235	3,245	2,413	2,487	2,723
DC	2,733	2,789	2,246	2,433	2,982	3,368	3,458	3,728	3,907	4,139	4,124	3,402	2,719	2,914
FL	3,760	4,068	3,824	4,648	5,343	6,863	7,176	8,441	9,613	10,169	10,188	8,150	8,190	8,971
GA	1,956	2,593	2,604	3,202	3,962	4,262	4,119	4,225	4,560	4,914	4,877	4,887	4,731	5,117
HI	--	--	--	--	--	--	--	--	--	--	--	--	--	876
ID	1,034	1,570	1,562	1,770	2,291	2,457	2,595	3,080	3,706	3,837	3,834	3,938	3,734	4,055
IL	20,906	21,622	19,582	26,320	28,517	29,061	29,021	30,388	33,371	35,290	35,350	42,869	43,008	42,490
IN	6,153	8,429	8,080	10,776	13,205	13,968	15,166	16,294	18,962	20,441	20,482	24,099	24,500	25,596
IA	6,099	7,435	7,610	8,925	9,791	10,204	10,488	10,399	11,417	12,543	12,548	9,883	11,360	11,141
KS	2,881	4,094	3,185	4,527	5,552	5,695	5,938	5,897	6,493	6,388	6,361	4,477	5,060	4,751
KY	1,586	1,980	1,956	2,274	2,753	3,250	3,359	3,291	4,126	4,476	4,548	4,978	5,800	4,833
LA	3,274	4,268	4,021	4,619	5,224	5,840	6,212	6,242	7,385	7,653	7,877	10,756	11,249	10,694
ME	2,266	2,638	2,576	3,496	3,935	4,276	4,514	5,309	5,703	6,425	6,426	6,434	7,108	7,456
MD	7,551	8,442	7,691	8,981	10,898	11,189	11,731	14,468	16,009	17,916	18,091	16,086	12,495	13,101
MA	19,290	20,919	19,741	22,769	27,261	28,064	27,925	31,306	34,036	35,859	35,981	47,452	47,781	51,022
MI	12,277	13,713	14,562	18,493	20,334	22,268	22,351	24,625	27,402	29,071	28,995	29,385	28,387	30,464
MN	9,327	10,229	10,094	12,448	14,560	15,478	15,784	16,218	17,409	18,765	18,726	16,468	15,079	16,241
MS	912	1,002	1,010	1,271	1,507	1,502	1,774	1,619	1,808	1,840	1,856	1,744	2,318	2,364
MO	7,072	8,110	6,822	7,815	8,684	10,224	10,854	11,283	12,137	12,306	12,418	14,274	12,700	12,830
MT	1,660	1,810	1,965	2,478	2,851	3,063	3,553	3,755	3,980	4,219	4,209	3,642	4,474	4,877
NE	3,340	3,744	3,386	3,707	3,829	4,071	4,378	4,723	5,229	5,561	5,549	3,527	3,929	4,183
NV	951	1,363	1,772	1,843	2,102	2,158	2,281	2,375	1,686	1,748	1,679	1,656	2,051	2,428
NH	1,387	1,455	1,945	2,765	3,102	3,442	3,370	4,220	4,498	5,123	5,089	3,951	4,049	4,484
NJ	26,011	28,755	26,993	30,521	32,298	33,028	33,124	35,733	38,971	41,335	41,370	42,923	45,634	45,542
NM	708	653	715	950	972	1,224	1,309	1,457	1,991	2,167	2,205	2,492	2,302	3,065
NY	38,888	45,902	45,252	52,173	56,334	59,373	59,604	64,262	70,276	72,606	72,755	85,779	79,499	81,677
NC	2,552	3,220	3,491	4,354	5,490	6,360	7,381	7,860	8,982	9,279	9,312	10,406	11,544	13,353
ND	1,067	1,312	1,616	1,939	2,026	2,456	2,425	2,600	3,151	3,740	3,726	2,976	3,632	3,775
OH	7,479	10,120	9,442	12,059	14,474	15,953	16,542	18,150	20,184	21,937	22,045	24,221	24,850	23,836
OK	1,084	1,571	1,929	1,928	2,223	2,192	2,436	2,368	2,493	2,454	2,470	1,754	2,603	2,631
OR	5,720	6,181	6,343	7,725	8,534	8,974	8,680	8,939	10,981	10,862	10,132	9,380	10,456	10,920
PA	19,916	22,198	20,849	28,266	34,585	35,827	36,513	40,288	44,286	45,734	45,698	45,322	44,029	45,668
RI	3,389	3,413	3,408	4,116	4,260	4,343	4,482	4,484	4,762	5,513	5,530	7,250	7,167	8,093
SC	1,427	1,662	1,630	1,854	2,202	2,491	3,004	2,990	3,259	3,445	3,588	4,266	4,454	5,203
SD	1,338	1,434	1,510	1,893	2,133	2,399	2,626	2,756	3,298	3,556	3,508	2,800	2,882	2,964
TN	2,018	2,143	2,125	3,062	3,428	3,487	3,628	3,529	3,845	3,767	3,652	3,226	5,037	5,268
TX	8,035	10,120	9,238	12,790	16,183	19,022	19,046	18,913	20,728	22,258	22,812	24,077	26,541	24,315
UT	1,223	1,448	1,474	2,001	2,334	3,263	3,542	3,574	3,994	4,235	4,256	4,655	3,478	3,841
VT	816	875	1,054	1,117	1,166	1,212	1,321	1,415	1,726	1,937	1,883	2,796	2,399	2,939
VA	4,539	5,319	5,380	7,855	9,156	9,800	9,442	10,888	13,242	14,293	14,782	13,300	12,984	14,184
WA	9,602	11,005	11,215	12,954	14,145	14,904	14,277	15,438	17,767	17,237	17,518	14,915	16,867	18,045
WV	475	585	554	651	1,229	1,188	1,331	1,307	1,500	2,095	2,039	1,913	2,154	2,462
WI	8,203	8,609	8,279	10,285	11,437	11,803	11,877	13,648	16,089	17,099	17,149	20,136	20,316	21,711
WY	643	1,600	1,504	1,732	1,893	2,103	2,294	2,624	2,829	3,092	2,977	3,697	3,539	3,258
TOT	298,014	341,973	329,196	395,306	448,908	479,210	488,844	526,245	581,127	615,775	617,275	653,559	658,992	683,325

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

Section VII
Table 9a

U.S. SALES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Gallons)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Alabama	4,310	4,938	5,148	5,887	5,335	5,239	4,148	6,556	7,378	8,510	8,849	12,093
Alaska	2,849	2,897	3,076	3,482	3,733	4,049	4,353	4,757	4,869	5,082	6,352	6,207
Arizona	3,107	3,001	3,520	3,528	3,584	4,030	3,761	4,599	4,722	4,898	5,242	8,786
Arkansas	3,078	2,451	2,579	3,358	2,899	3,259	3,282	4,079	4,647	5,474	5,489	9,412
California	27,410	29,685	32,256	34,991	35,672	38,335	38,767	38,519	39,112	39,188	47,357	45,797
Colorado	4,441	4,148	4,580	4,074	4,002	4,670	4,811	5,574	5,490	5,211	6,242	6,784
Connecticut	23,199	23,099	22,906	20,378	21,415	20,408	20,785	21,748	22,673	24,147	24,100	24,735
Delaware	2,537	3,097	3,474	3,257	3,361	3,381	3,417	3,918	4,097	4,309	4,345	4,298
Dist. of Col.	2,726	2,878	2,872	2,957	3,566	3,489	3,424	3,525	4,377	4,934	3,834	3,314
Florida	9,369	10,611	10,902	11,076	12,456	14,179	13,733	14,794	14,913	15,698	16,525	19,488
Georgia	5,269	6,218	6,969	6,977	8,666	10,059	11,558	12,013	12,540	12,784	14,638	16,491
Hawaii	1,666	1,641	1,375	1,769	1,613	1,369	1,190	1,381	1,573	1,695	1,706	1,622
Idaho	4,037	4,204	4,108	4,501	4,880	4,916	7,433	7,748	5,844	5,597	5,702	5,866
Illinois	42,255	41,361	41,421	41,580	41,702	39,831	39,846	42,795	44,498	44,517	49,467	55,276
Indiana	25,452	25,743	25,934	25,813	26,340	26,338	26,538	27,355	29,493	29,363	30,670	34,233
Iowa	10,043	11,022	11,106	10,968	11,256	12,579	12,823	14,172	13,828	13,681	14,242	14,975
Kansas	5,187	5,242	4,612	5,487	5,405	6,310	6,009	6,660	6,488	7,559	8,401	9,166
Kentucky	4,428	5,822	5,532	5,697	5,659	7,068	6,901	7,304	7,865	8,209	7,776	9,470
Louisiana	9,038	9,622	9,762	9,688	8,517	9,284	7,847	9,858	10,737	11,796	13,384	17,644
Maine	8,307	8,645	9,487	8,792	9,424	9,038	10,110	10,647	11,417	11,837	12,120	12,744
Maryland	14,257	15,146	16,014	16,863	17,361	18,016	17,851	18,759	18,618	19,860	20,000	21,435
Massachusetts	52,266	53,448	51,664	49,966	56,694	51,262	54,943	56,315	58,399	59,211	61,609	63,616
Michigan	30,547	31,131	30,471	29,576	31,079	32,127	37,376	36,601	37,473	38,108	41,684	48,660
Minnesota	15,967	16,776	16,629	16,739	19,227	21,195	20,083	22,233	22,121	22,390	23,777	25,979
Mississippi	1,954	2,715	2,885	3,322	2,841	3,169	3,459	5,097	5,775	5,987	7,215	9,413
Missouri	12,858	13,412	13,939	13,884	14,077	13,908	13,924	17,067	16,473	16,218	16,350	18,101
Montana	5,248	5,522	5,400	5,684	5,041	5,802	3,459	4,119	4,669	4,823	5,709	6,121
Nebraska	4,481	4,099	4,387	4,689	3,789	4,590	5,311	6,487	6,492	7,459	7,604	9,002
Nevada	2,985	3,017	2,844	3,523	2,821	2,495	2,350	2,693	2,767	2,832	3,151	2,924
New Hampshire	5,486	5,834	6,327	5,742	5,907	6,073	6,823	7,106	7,490	7,676	8,085	8,303
New Jersey	46,992	48,622	51,466	51,655	54,123	57,123	58,871	60,056	62,077	63,447	64,769	72,659
New Mexico	2,841	3,512	3,642	3,946	3,971	3,647	3,064	4,183	4,547	5,405	5,395	6,569
New York	86,029	94,501	95,856	94,610	104,690	102,827	107,192	106,843	108,646	111,122	113,833	122,075
N. Carolina	13,366	15,617	16,000	16,249	17,428	20,869	20,577	19,944	20,407	22,553	21,609	23,030
N. Dakota	3,693	4,472	4,584	4,529	5,252	6,008	6,036	6,156	5,959	4,973	4,915	5,135
Ohio	23,433	24,250	26,348	27,121	28,132	31,216	31,161	34,025	34,386	34,435	35,090	41,414
Oklahoma	3,152	3,243	3,729	3,325	2,950	3,618	3,980	5,173	4,961	5,573	5,473	7,828
Oregon	11,061	11,777	12,828	13,855	13,295	13,837	13,083	13,298	13,646	12,895	14,162	15,467
Pennsylvania	45,982	49,315	51,702	50,699	54,818	54,501	57,146	59,721	60,668	63,544	63,221	70,757
Rhode Island	7,547	7,411	7,391	6,272	7,017	6,627	7,287	7,746	8,517	8,623	9,070	9,176
S. Carolina	5,116	5,776	6,169	5,228	4,910	6,541	6,542	7,788	8,543	9,469	9,114	9,722
S. Dakota	3,085	3,212	3,370	3,823	3,838	4,130	3,875	3,830	3,802	4,372	4,600	4,469
Tennessee	5,552	6,167	6,706	6,784	7,414	9,404	8,902	10,278	10,432	10,945	11,609	14,218
Texas	21,795	23,959	24,092	23,998	25,280	23,311	23,022	24,457	29,791	32,398	34,884	46,515
Utah	3,085	3,607	3,640	3,766	4,275	4,886	4,702	4,750	5,028	5,104	6,515	6,310
Vermont	3,299	3,602	3,787	3,603	4,318	4,825	4,946	5,058	5,514	5,732	5,472	5,729
Virginia	14,631	15,843	16,945	16,542	18,941	21,304	21,796	22,286	23,218	24,624	24,441	25,020
Washington	17,532	17,057	16,791	17,997	17,390	17,910	16,459	17,792	18,201	18,188	18,621	19,090
W. Virginia	2,525	2,490	2,622	2,320	2,882	3,177	3,303	3,743	3,786	3,913	4,658	5,532
Wisconsin	22,153	23,399	23,461	23,328	23,902	24,446	26,918	26,341	26,084	25,827	26,520	26,781
Wyoming	3,250	3,838	3,816	3,653	3,743	3,038	4,023	5,153	5,249	5,055	5,724	5,419
TOTAL	690,874	729,095	748,124	747,551	786,891	809,713	829,200	873,100	900,300	927,250	971,320	1,074,870

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

U.S. DELIVERIES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1973	1974	1975	1976(1)	1977(1)	1978(1)	1979	1980	1981	1982	1983
AL	13,988	14,761	14,488	18,032	19,624	20,194	15,996	19,419	17,939	15,436	15,457
AK	6,384	6,591	6,946	9,517	10,187	10,571	5,808	6,781	6,548	6,335	7,066
AZ	15,118	11,197	11,481	10,181	13,727	13,829	13,194	11,330	9,741	8,102	8,792
AR	9,949	10,316	9,392	10,228	12,451	13,014	16,163	14,209	13,116	13,336	13,389
CA	51,165	42,991	43,129	45,545	54,009	60,126	68,104	61,338	67,494	67,337	68,413
CO	7,737	8,712	8,590	9,408	9,668	10,023	10,451	9,665	8,634	9,132	10,915
CT	25,181	22,677	21,844	23,706	23,249	23,011	27,916	22,499	19,745	20,509	16,933
DE	4,382	4,310	4,487	4,615	5,096	4,840	3,685	3,702	3,133	2,753	3,376
DC	3,462	3,497	3,112	3,781	4,005	6,204	4,364	3,436	2,125	2,215	2,769
FL	22,662	22,599	23,083	24,268	28,236	28,920	28,084	28,520	29,816	22,503	27,765
GA	20,478	20,835	16,922	22,480	22,559	19,641	18,692	19,397	19,388	18,387	21,917
HI	1,839	1,897	2,512	2,370	3,502	3,246	6,451	5,915	6,043	4,570	2,327
ID	6,297	6,876	7,378	7,346	7,983	8,362	6,504	4,879	4,775	4,496	5,263
IL	54,288	53,950	52,103	58,877	58,459	61,760	48,584	36,086	34,427	32,521	35,503
IN	34,353	34,516	33,314	36,193	38,044	39,278	35,653	30,488	28,961	28,913	27,720
IA	15,467	14,751	14,249	15,257	16,012	16,687	20,595	15,793	14,374	16,212	14,086
KS	10,330	11,080	11,328	11,986	12,484	14,317	18,960	13,923	13,239	13,817	13,921
KY	10,457	10,176	10,760	13,566	16,845	18,809	20,608	22,598	18,217	17,507	20,442
LA	24,677	24,766	22,139	23,324	32,251	33,185	37,224	32,804	37,964	30,858	31,105
ME	12,147	11,659	11,331	13,407	14,476	13,373	11,218	10,627	9,266	9,189	7,325
MD	22,591	22,094	21,712	20,571	21,748	21,341	23,971	22,417	18,365	16,198	18,881
MA	62,970	58,934	57,195	61,666	59,564	57,446	42,347	37,413	32,155	32,263	31,364
MI	47,146	44,204	41,747	43,826	44,835	45,461	30,892	27,841	26,657	22,819	22,525
MN	26,768	24,185	23,974	27,513	26,645	27,807	26,069	21,826	18,714	20,880	17,413
MS	13,045	14,372	12,188	13,713	14,584	16,306	12,277	12,905	13,487	11,849	13,306
MO	18,781	17,424	17,106	19,555	20,588	23,027	22,780	18,150	18,003	20,738	16,762
MT	6,924	7,646	7,459	8,383	8,141	8,114	7,774	6,626	6,486	5,814	8,883
NE	9,262	8,684	8,363	10,178	10,643	12,127	12,601	9,145	8,233	9,176	11,580
NV	3,304	2,561	2,535	2,715	3,055	3,822	3,189	4,022	3,488	3,518	5,304
NH	8,208	7,551	7,047	8,758	8,231	8,292	5,741	5,845	5,313	5,084	4,520
NJ	74,564	67,426	58,937	61,787	60,052	56,592	50,447	52,719	50,973	45,546	38,917
NM	7,948	7,635	8,080	8,022	9,337	9,633	10,431	10,222	12,526	7,954	6,705
NY	120,200	108,677	104,646	115,237	114,446	114,344	88,449	72,515	64,263	62,608	56,525
NC	24,898	22,246	20,965	23,881	27,107	24,749	29,404	23,820	21,228	20,184	24,626
ND	4,626	4,303	4,362	4,061	4,069	4,194	8,268	8,037	7,708	7,209	6,867
OH	41,415	40,831	42,160	51,519	52,501	55,346	44,952	48,397	44,959	40,250	33,180
OK	8,814	8,744	9,696	11,775	12,775	14,477	14,119	12,051	15,519	14,557	16,635
OR	16,070	14,324	13,240	14,062	16,794	16,671	19,281	17,051	16,492	15,020	16,094
PA	70,793	71,508	66,341	74,691	77,861	73,311	76,651	68,066	59,977	53,065	51,763
RI	8,633	8,038	7,787	8,478	8,199	7,679	7,042	5,046	3,993	3,984	4,736
SC	10,956	9,638	8,132	10,218	12,972	11,023	11,894	10,730	9,841	9,462	10,592
SD	4,140	3,586	3,821	3,311	3,042	3,670	6,166	4,842	4,406	5,131	4,464
TN	15,310	15,815	17,657	21,469	24,071	26,825	23,504	18,818	19,512	18,764	21,519
TX	57,567	58,766	55,262	58,655	74,678	81,171	96,359	95,939	90,359	90,180	95,849
UT	7,792	8,624	8,962	8,367	8,631	9,023	8,150	7,412	7,115	6,425	6,459
VT	6,001	4,981	4,566	5,394	5,274	5,135	5,389	4,076	3,828	2,707	3,457
VA	26,561	24,938	24,534	25,339	28,332	27,161	33,726	24,406	23,638	21,943	25,087
WA	20,091	16,345	16,606	18,405	19,800	20,765	21,776	18,709	17,695	18,200	16,382
WV	5,992	5,622	6,478	6,807	9,019	8,796	10,904	10,340	9,450	7,659	9,930
WI	27,264	26,330	26,035	30,366	31,107	32,940	31,504	22,539	20,726	20,537	20,399
WY	6,138	6,897	7,565	8,120	9,211	10,423	10,063	11,375	12,452	11,015	7,219
TOT	1,135,063	1,081,086	1,043,746	1,150,929	1,230,179	1,257,061	1,214,374	1,086,709	1,032,476	974,864	981,926

Source: U.S. Department of Energy, Sales of Fuel Oil and Kerosine, Petroleum Supply Annuals, and Petroleum Marketing Monthly, July 1985

U.S. DELIVERIES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1984	1985	1986	1987
Alabama	16,234	16,402	16,596	18,885
Alaska	7,840	10,163	7,994	8,198
Arizona	9,885	10.049	11,147	10,405
Arkansas	16,243	15,076	13,536	13,703
California	76,288	72,468	74,955	74,040
Colorado	11,344	9,621	10,140	9,876
Connecticut	18,544	18,937	20,501	21,082
Delaware	3,556	3,398	3,281	4,047
Dist. of Col.	3,054	2,476	2,835	2,668
Florida	29,210	30,320	31,953	32,960
Georgia	23,865	23,676	24,528	26,007
Hawaii	2,766	4,631	4,676	4,289
Idaho	5,898	5,596	5,914	6,390
Illinois	37,485	32,699	35,073	34,387
Indiana	31,123	30,734	31,758	31,750
Iowa	15,314	15,461	15,898	15,750
Kansas	15,068	14,954	14,201	16,644
Kentucky	22,061	21,722	20,311	20,547
Louisiana	31,448	33,660	35,006	36,727
Maine	8,339	9,580	11,470	11,965
Maryland	18,704	17,849	17,747	18,021
Massachusetts	32,693	32,511	34,707	36,951
Michigan	24,282	25,625	26,691	25,615
Minnesota	18,142	19,463	18,956	18,326
Mississippi	14,118	15,923	14,842	16,732
Missouri	18,543	19,532	18,358	19,344
Montana	9,366	11,334	6,999	6,548
Nebraska	12,007	12,356	12,004	13,324
Nevada	5,561	5,431	5,575	6,506
New Hampshire	4,762	5,246	5,765	7,539
New Jersey	40,323	40,122	45,606	43,194
New Mexico	7,103	8,513	9,704	10,632
New York	58,478	61,513	70,851	72,661
North Carolina	26,155	24,853	27,585	28,376
North Dakota	7,405	7,495	7,394	6,810
Ohio	35,888	36,069	35,814	33,555
Oklahoma	17,931	18,341	13,836	13,897
Oregon	15,728	15,429	14,889	16,207
Pennsylvania	54,048	53,042	53,529	57,419
Rhode Island	4,905	4,457	5,308	6,045
South Carolina	11,520	11,814	11,716	11,913
South Dakota	4,876	4,989	6,044	5,892
Tennessee	23,895	22,309	22,414	22,464
Texas	96,771	95,235	86,265	88,658
Utah	6,997	5,951	7,428	6,792
Vermont	3,709	4,182	3,943	4,355
Virginia	25,948	25,263	28,439	29,361
Washington	18,187	20,408	23,288	21,243
West Virginia	10,424	9,779	7,583	8,912
Wisconsin	21,867	22,516	21,825	21,033
Wyoming	7,321	7,697	6,864	8,767
TOTAL	1,041,217	1,046,827	1,063,740	1,086,413

Source: U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

Section VII
Table 10

U.S. DELIVERIES OF DISTILLATE FUEL OIL BY USES
(Thousands of Barrels)

Year	Heating Oils	Industrial Use	Oil Company Fuel	Electric Utility Company	Railroads	Vessel Bunkering	Military Use	Diesel	All Other	Total
1947	189,991	24,489	2,191	14,216	23,619	14,475	5,176	14,579	9,278	298,014
1948	213,558	29,932	3,625	14,856	31,006	14,511	9,071	15,971	9,443	341,973
1949	202,666	26,424	4,151	12,550	38,604	13,121	6,109	16,734	8,837	329,196
1950	235,740	37,121	5,692	13,207	48,703	12,872	6,553	21,333	14,085	395,306
1951	265,982	42,567	7,811	9,612	59,962	14,393	8,430	25,485	14,666	448,908
1952	279,326	42,760	7,976	8,350	68,002	17,213	9,644	30,551	15,388	479,210
1953	283,100	42,384	7,755	6,825	75,246	16,898	9,569	34,980	12,087	488,844
1954	320,117	41,589	7,699	6,070	77,389	15,563	8,752	38,809	10,257	526,245
1955	356,589	43,606	8,597	5,884	84,668	16,675	10,945	44,215	9,948	581,127
1956	377,262	44,949	10,131	5,403	89,439	18,487	11,326	48,870	9,908	615,775
1957	377,044	43,523	10,419	5,296	88,315	20,420	12,737	49,684	9,828	617,275
1958	412,670	37,553	7,815	5,382	83,719	18,768	13,412	65,186	9,054	653,559
1959(2)	415,521	33,380	8,642	5,005	87,802	19,250	11,394	70,527	7,471	658,992
1960(3)	438,010	34,271	8,347	4,742	86,490	18,730	10,793	74,562	7,380	683,325
1961	450,292	31,226	8,743	4,151	85,180	14,566	11,484	77,825	7,407	690,874
1962	466,830	34,951	9,055	4,100	86,803	15,836	13,041	89,729	8,750	729,095
1963	465,315	36,647	10,253	4,149	88,117	15,148	13,436	106,341	8,718	748,124
1964	451,860	36,007	10,576	3,849	88,198	16,001	13,609	117,534	9,917	747,551
1965	475,992	42,484	10,430	3,661	86,436	15,532	14,953	124,122	13,281	786,891
1966	472,778	47,108	10,485	3,612	89,104	16,642	16,303	135,776	17,905	809,713
1967	501,026	44,997	8,997	2,858	88,688	17,478	17,325	(1)	47,831	829,200
1968	510,682	45,795	9,975	8,509(4)	84,030	18,235	12,593	171,773	11,508	873,199
1969	511,768	42,456	13,867	12,158	86,429	18,877	13,958	188,253	12,534	900,300
1970	521,135	43,668	11,518	24,770	88,416	19,503	12,447	194,919	10,874	927,250
1971	522,475	50,731	14,088	35,329	86,251	20,959	17,427	213,906	10,154	971,320
1972	543,337	60,388	13,405	68,334	97,001	22,125	20,187	239,241	10,852	1,074,870
1973	536,856	67,306	14,902	77,950	102,828	26,786	19,598	276,961	11,876	1,135,063
1974	493,223	64,036	13,805	84,661	102,949	24,757	17,748	269,776	10,131	1,081,086

(1) Data not available
(2) Includes Alaska
(3) Includes Alaska and Hawaii
(4) Includes gas turbine plants in 1968 and subsequent years

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

Section VII
Table 10a

U.S. DELIVERIES OF DISTILLATE FUEL OIL BY USES
(Thousands of Barrels)

Year	Heating Oils(5)(9)	Industrial Use(6)	Oil Company Fuel	Electric Utility Company(7)	Railroads	Vessels Bunkering	Military Use(8)	Diesel	All Other	Total
1975	488,388	63,993	13,633	63,420	92,191	26,138	18,004	266,883	10,096	1,043,746
1976	543,895	79,956	14,523	60,570	97,467	28,330	17,574	297,249	11,365	1,150,929
1977	538,845	96,502	19,954	76,681	99,306	33,512	20,121	330,864	14,394	1,230,179
1978	533,069	94,797	19,410	77,175	99,841	37,591	20,320	360,799	14,059	1,257,061
1979	454,955	99,583	22,043	46,579	103,493	41,725	18,570	392,614	34,812	1,214,374
1980	393,112	86,089	24,205	31,812	102,022	35,201	19,138	375,136	19,994	1,086,709
1981	345,728	80,216	29,185	18,192	100,482	41,025	17,763	378,853	21,032	1,032,476
1982	324,912	71,340	29,482	12,134	93,150	33,885	15,201	375,124	19,639	974,864
1983	339,455	54,030	21,510	11,744	76,230	39,108	15,804	408,594	15,541	981,926
1984	352,127	56,114	21,623	16,405	82,308	40,287	16,579	439,786	15,988	1,041,217
1985	358,129	61,730	20,869	12,246	76,422	45,102	18,290	411,420	4,198	1,046,827
1986	356,380	63,907	17,857	14,628	73,800	48,434	18,105	467,280	3,349	1,063,740
1987	355,899	69,467	20,994	15,383	74,944	52,935	21,057	473,930	1,805	1,086,413

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(5) Includes range oil
(6) Excludes oil company use
(7) Includes kerosine-type jet fuel: 1976 -- 11,600 bbls. per day; 1977 -- 18,770 bbls. per day; 1978 -- 12,342 bbls. per day.
(8) Includes imports by military
(9) Beginning in 1979, heating oils is no longer a separate category. The figure is derived by adding residential, commercial and farming.

Source: 1975-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1987 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

Section VII
Table 11

U.S. SALES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
AL	3,294	2,296	1,891	2,271	2,417	2,677	3,873	3,123	3,907	4,162	4,203	4,240	4,178	4,202
AK	--	--	--	--	--	--	--	--	--	--	--	--	574	695
AZ	3,491	1,841	1,087	1,448	1,157	542	206	45	61	35	21	37	34	95
AR	2,253	2,080	1,833	2,273	2,051	1,497	1,006	415	419	545	549	455	346	474
CA	90,916	79,081	77,171	78,397	85,884	79,127	85,870	79,973	83,959	84,421	79,245	72,232	72,287	78,774
CO	1,218	886	783	1,050	1,068	1,203	1,124	1,326	1,363	1,434	1,369	1,330	1,603	1,790
CT	8,838	10,066	14,515	16,845	14,888	13,475	14,377	12,897	13,108	13,219	12,712	17,041	15,814	14,450
DE	1,139	1,043	1,921	2,373	1,888	2,501	2,558	2,228	2,907	2,956	2,973	5,992	7,063	6,081
DC	935	855	1,427	1,188	1,688	1,915	2,035	1,963	2,152	2,106	2,501	2,243	2,450	2,387
FL	15,519	16,132	15,671	17,009	20,322	24,789	27,343	28,909	32,236	34,910	36,228	37,470	33,310	28,978
GA	2,933	3,375	4,227	4,733	5,619	5,816	6,573	5,590	6,118	5,955	6,128	7,145	6,824	6,413
HI	--	--	--	--	--	--	--	--	--	--	--	--	--	5,613
ID	460	456	480	629	945	1,029	1,067	1,115	1,421	1,256	1,185	210	185	201
IL	17,047	15,276	15,570	19,517	20,257	20,455	20,823	20,499	22,227	22,571	21,375	26,926	23,689	25,893
IN	12,386	13,497	13,343	15,841	16,850	17,230	17,679	14,234	14,588	15,206	14,753	11,955	13,035	12,885
IA	777	742	1,176	1,321	1,365	1,217	1,051	884	994	1,165	1,125	869	1,088	1,021
KS	11,224	10,166	8,226	5,893	7,110	6,071	5,247	4,020	4,179	3,827	3,586	1,420	1,943	2,249
KY	824	1,303	1,679	1,260	1,007	738	913	949	1,013	1,062	1,051	503	570	321
LA	14,835	19,434	15,220	11,221	10,953	10,422	9,929	9,710	10,601	10,804	11,359	13,411	10,764	8,599
ME	2,809	2,342	2,704	3,550	3,178	4,032	4,228	3,481	4,443	4,872	5,063	5,290	6,433	5,742
MD	17,119	13,276	13,521	14,168	15,814	14,852	15,323	14,031	15,466	15,770	15,364	14,974	17,385	16,490
MA	16,976	18,082	23,476	30,715	29,883	30,003	32,763	30,500	30,496	29,574	28,744	29,308	35,532	38,942
MI	7,046	11,051	11,403	12,708	13,743	14,153	14,809	14,675	15,387	16,008	15,330	9,340	13,498	11,242
MN	1,022	1,315	1,467	2,432	2,431	2,430	2,370	2,352	2,700	2,987	2,955	4,963	6,399	6,393
MS	343	411	314	348	257	173	163	160	179	219	232	268	435	339
MO	6,920	6,609	5,260	5,389	5,379	5,146	5,140	4,837	5,863	6,126	5,758	3,774	3,129	3,026
MT	5,444	4,935	3,702	4,222	4,958	4,220	3,276	1,751	1,692	1,646	1,554	1,643	2,006	2,002
NE	378	329	422	550	467	334	351	313	363	377	375	151	218	378
NV	5,957	4,372	1,514	2,889	2,685	2,266	2,048	1,353	1,359	383	269	195	146	202
NH	959	909	1,175	1,873	2,326	2,295	2,467	2,129	2,377	2,107	2,096	2,022	2,984	2,324
NJ	46,167	33,680	37,973	49,092	44,775	44,153	47,667	43,339	46,154	44,587	45,136	36,841	41,422	42,971
NM	840	685	460	696	532	831	696	262	283	505	438	359	107	173
NY	32,907	45,871	49,168	61,829	52,684	50,966	53,437	50,809	51,912	51,737	51,168	71,533	79,784	76,586
NC	433	461	560	990	1,109	1,257	1,439	1,809	2,377	2,558	2,467	3,034	3,908	4,537
ND	414	447	358	297	224	120	124	179	515	870	783	625	597	663
OH	16,534	16,089	16,779	18,004	18,017	17,670	18,698	18,118	18,915	19,206	18,530	9,721	11,028	11,382
OK	8,276	7,723	5,438	4,783	3,890	3,011	2,351	1,479	1,783	1,857	1,740	1,001	1,319	1,396
OR	15,482	14,892	12,845	12,429	12,215	13,168	11,186	9,776	10,152	9,401	7,181	5,253	5,121	5,453
PA	35,794	37,240	35,391	41,110	42,614	42,491	42,951	42,734	45,176	45,325	44,482	39,873	45,660	42,731
RI	7,088	7,917	8,508	10,891	10,030	9,756	10,993	9,473	11,215	11,303	11,114	11,127	10,350	9,502
SC	2,349	2,496	2,610	3,652	4,145	5,230	5,332	3,985	4,291	4,389	4,383	4,660	4,886	4,634
SD	257	288	262	294	231	239	232	165	176	211	217	100	48	60
TN	1,015	890	919	1,398	1,331	1,097	1,257	652	930	879	865	384	284	184
TX	66,789	63,376	48,481	48,560	50,464	46,508	41,978	36,312	38,108	37,883	37,859	29,082	25,275	22,102
UT	1,486	1,585	3,639	4,767	4,979	5,351	5,044	4,321	4,392	4,478	4,201	5,077	5,872	5,562
VT	262	258	281	382	300	300	475	409	424	402	380	455	275	498
VA	11,298	10,590	12,200	12,883	18,037	20,294	15,523	12,998	16,556	17,452	17,739	21,411	17,703	17,448
WA	14,149	13,304	12,043	13,715	14,644	17,025	14,328	14,978	16,405	16,975	11,795	8,747	9,162	9,179
WV	828	1,171	1,366	1,587	1,464	1,337	1,526	1,269	1,355	1,317	1,321	894	1,620	1,451
WI	1,358	1,497	1,515	1,712	1,861	2,042	2,118	2,109	2,168	2,290	2,201	3,458	4,167	4,275
WY	2,741	3,877	2,959	3,024	3,252	2,819	2,762	2,076	2,118	2,156	1,847	2,325	1,842	1,738
TOT	520,529	506,497	494,933	554,208	563,338	556,273	564,729	520,714	556,983	561,538	543,950	531,367	554,352	550,536

Source: Bureau of Mines, Mineral Industry Surveys, "Sales of Fuel Oil and Kerosine," Annual.

Section VII
Table 11a

U.S. SALES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
AL	3,555	2,749	3,184	2,274	2,459	2,752	2,835	2,773	3,392	3,283	2,601	3,170
AK	641	715	742	800	863	939	840	913	1,056	1,034	1,043	1,166
AZ	94	117	60	113	40	87	82	113	156	94	723	1,139
AR	379	566	864	750	406	359	495	654	501	1,584	2,887	3,183
CA	81,587	68,949	62,842	66,927	67,614	75,104	70,407	73,420	73,638	65,503	80,467	83,978
CO	2,465	2,497	2,572	2,617	1,961	1,700	1,327	1,529	2,103	1,531	1,572	1,984
CT	14,549	16,019	16,260	19,848	16,776	20,283	25,195	28,433	32,924	36,057	34,564	40,706
DE	4,986	4,775	4,707	4,473	5,317	5,293	3,844	4,357	5,893	6,581	6,194	9,640
DC	1,955	2,243	2,533	3,914	6,504	6,783	8,126	9,138	10,042	11,148	10,748	10,656
FL	32,600	37,044	36,668	39,425	43,093	41,884	38,605	40,543	44,523	55,169	62,414	76,325
GA	5,048	5,285	5,663	7,049	8,106	7,295	8,099	8,725	9,020	10,255	10,488	12,960
HI	6,646	6,716	6,940	7,539	7,673	8,266	8,724	9,730	9,997	10,162	10,631	11,316
ID	422	223	260	433	344	208	137	206	402	276	276	246
IL	25,750	24,756	25,582	21,411	22,220	21,151	23,410	24,136	25,456	28,618	23,708	29,581
IN	11,988	10,736	10,756	11,464	12,601	11,729	11,142	11,550	9,519	9,757	12,194	14,326
IA	1,032	873	931	1,034	513	866	490	441	393	408	411	325
KS	1,433	1,533	1,565	1,127	1,052	1,021	1,252	1,625	1,438	1,247	827	1,974
KY	278	389	460	559	576	696	891	850	1,043	1,061	674	1,159
LA	8,537	6,563	6,653	7,293	7,589	6,716	10,240	10,094	11,509	11,270	8,384	8,667
ME	6,366	5,985	5,332	7,546	6,442	8,077	8,121	8,590	9,467	11,693	18,331	21,365
MD	12,955	13,751	13,270	14,444	15,140	16,178	11,893	12,642	15,321	22,446	30,059	38,273
MA	40,242	41,852	37,693	43,320	53,294	60,234	66,460	68,586	73,572	86,063	82,917	87,930
MI	9,896	9,275	9,746	8,905	8,011	7,634	5,415	5,667	6,704	10,059	11,605	11,388
MN	5,524	6,307	6,102	5,671	4,827	4,740	3,647	3,952	5,165	5,150	4,075	6,943
MS	338	474	878	826	482	334	248	591	688	896	1,074	2,365
MO	2,638	2,131	2,335	2,400	3,252	2,623	3,371	3,379	3,640	3,615	2,904	2,552
MT	2,533	3,049	2,836	2,356	1,195	1,371	1,189	1,495	1,524	1,249	1,236	1,485
NE	419	626	1,133	958	310	382	527	605	731	798	597	706
NV	258	165	180	133	83	61	90	122	105	144	272	242
NH	2,067	2,545	2,524	2,588	2,408	3,911	3,612	2,993	4,434	5,514	6,016	5,961
NJ	42,990	50,422	50,539	50,135	42,445	50,461	63,810	67,583	73,697	80,840	75,213	80,761
NM	311	323	209	146	655	363	111	90	95	215	466	621
NV	83,518	89,667	88,606	84,596	102,974	115,903	128,294	132,907	136,327	152,487	159,609	164,123
NC	4,738	3,725	3,318	3,781	4,583	5,106	5,209	4,759	6,112	6,922	10,433	15,926
ND	552	524	553	678	834	685	536	607	548	726	645	781
OH	9,023	8,227	7,790	9,233	10,558	7,984	6,722	6,045	6,183	6,532	5,259	5,840
OK	873	967	797	825	795	637	776	866	683	744	637	1,355
OR	4,879	4,989	4,930	5,314	4,931	5,617	5,517	6,735	6,796	6,679	6,538	7,977
PA	38,970	41,422	42,245	43,636	42,430	47,160	44,348	47,013	52,489	60,389	59,973	58,490
RI	7,543	8,274	8,177	8,218	6,186	6,204	8,971	8,165	9,147	9,739	10,036	9,811
SC	5,031	5,908	5,833	5,050	3,762	3,971	3,225	3,812	4,138	5,328	5,493	6,395
SD	36	152	245	106	48	67	58	110	181	348	227	335
TN	171	105	275	287	276	331	465	334	786	596	365	523
TX	21,437	18,711	17,485	17,509	13,772	13,360	13,598	13,782	14,110	14,440	12,205	13,751
UT	5,654	6,048	5,790	5,502	5,500	5,738	5,348	5,617	6,030	4,657	5,030	4,538
VT	540	629	607	413	937	1,048	504	547	677	903	898	954
VA	14,195	13,225	14,055	15,516	16,179	14,797	14,925	14,701	22,701	33,236	40,565	44,530
WA	7,545	7,626	7,625	8,807	8,824	9,555	9,370	11,832	11,011	10,368	9,288	11,812
WV	1,216	1,480	1,572	2,297	2,087	2,527	2,117	1,984	1,976	2,064	1,906	1,748
WI	4,028	3,813	4,110	4,145	3,086	3,015	2,242	2,149	2,135	2,927	2,133	2,296
WY	2,555	3,288	2,490	2,241	2,105	1,866	2,733	1,994	2,351	1,482	1,233	1,369
TOT	542,986	548,433	538,522	556,632	574,118	613,972	639,539	669,484	722,629	804,287	838,044	925,647

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

U.S. DELIVERIES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
AL	6,151	10,496	13,220	14,684	16,272	16,443	11,294	8,820	4,686	6,350	3,764	4,150
AK	1,051	1,098	1,104	1,342	1,738	2,595	321	397	249	301	60	67
AZ	4,288	6,943	5,182	4,108	7,478	3,413	5,032	1,046	227	297	616	562
AR	10,720	10,369	9,006	13,071	17,258	16,747	11,813	5,472	2,449	1,803	775	1,045
CA	121,059	105,314	113,782	136,080	180,436	140,595	160,428	162,365	126,463	81,392	62,534	67,319
CO	2,317	3,177	3,591	3,903	3,502	4,091	1,041	1,373	165	14	342	324
CT	43,180	38,546	32,395	32,665	32,183	36,325	27,241	28,209	21,951	21,349	35,676	32,541
DE	13,117	12,632	10,239	11,332	11,524	11,376	11,073	12,889	8,671	6,289	3,627	3,290
DC	11,200	7,437	4,239	3,802	4,989	2,235	767	444	389	1,527	918	857
FL	82,873	75,440	78,885	92,171	85,323	91,175	98,722	96,955	90,347	63,079	35,937	32,561
GA	13,888	13,454	9,831	12,257	12,666	11,988	13,368	8,512	6,251	5,562	5,013	4,489
HI	11,580	11,219	10,776	11,778	12,512	12,796	12,641	13,251	13,311	13,323	14,649	13,623
ID	243	597	703	803	697	1,003	580	460	55	223	113	107
IL	28,795	28,521	26,948	23,659	26,598	30,111	26,675	28,023	21,399	15,507	8,686	7,505
IN	15,536	16,078	14,052	19,188	19,447	19,004	16,271	14,335	7,638	4,856	3,262	2,862
IA	679	628	405	588	764	599	836	360	100	321	208	180
KS	2,847	2,660	5,945	6,416	6,307	6,686	4,830	1,046	697	993	1,832	1,580
KY	1,094	2,084	2,127	2,426	2,706	2,506	1,151	966	1,150	1,197	1,275	1,094
LA	16,952	25,466	28,393	38,317	52,527	54,252	63,359	72,686	55,687	48,260	44,187	49,625
ME	19,860	15,272	10,064	13,116	12,234	11,415	10,738	8,413	10,090	15,803	5,742	5,183
MD	42,534	39,310	25,538	27,330	26,122	28,217	23,851	16,090	12,396	11,898	11,958	10,795
MA	86,282	69,385	66,946	76,380	72,242	72,208	58,958	52,948	49,673	42,762	24,722	22,463
MI	14,560	14,876	18,739	20,656	21,345	24,871	18,547	11,934	8,947	4,285	3,823	3,290
MN	7,069	5,883	4,322	5,796	4,414	4,576	2,695	3,044	1,460	1,732	1,688	1,487
MS	3,955	7,436	9,752	13,881	20,507	23,308	24,740	17,459	9,725	5,570	2,381	2,375
MO	2,959	2,375	2,992	2,948	3,647	3,620	3,196	1,370	656	856	580	500
MT	1,705	2,290	2,186	2,549	2,414	2,665	4,188	3,012	2,519	1,668	1,418	1,349
NE	639	1,045	1,077	1,650	1,189	1,410	622	78	57	198	113	97
NV	612	690	1,456	649	1,455	2,756	1,541	2,503	250	119	90	80
NH	5,382	4,786	4,801	5,949	5,916	5,408	6,109	5,437	4,835	4,106	1,680	1,519
NJ	79,204	64,417	49,222	58,606	60,947	61,726	60,980	53,167	38,279	34,241	52,464	47,312
NM	1,220	1,714	1,632	1,582	1,503	1,081	596	1,305	856	716	3,576	4,823
NY	169,669	155,327	146,837	157,812	157,773	153,037	130,344	112,872	97,868	90,073	73,436	66,754
NC	15,393	13,819	7,786	12,667	14,499	12,814	11,889	9,114	5,677	5,971	6,297	5,680
ND	898	1,190	1,101	1,045	889	950	801	701	1,130	1,171	1,645	1,410
OH	6,866	8,330	9,957	11,041	14,491	13,431	9,674	6,282	5,920	2,488	4,346	3,742
OK	1,629	1,201	752	683	661	987	820	719	745	700	559	479
OR	7,439	6,650	4,484	3,606	3,395	5,087	5,526	4,562	6,407	10,927	4,607	4,893
PA	59,371	57,001	43,997	51,079	60,387	61,366	45,365	34,777	30,340	20,789	[illegible]1,706	19,687
RI	8,376	6,316	4,600	4,631	4,678	4,088	2,387	2,230	2,227	1,791	[illegible],060	958
SC	9,636	9,777	7,652	11,901	13,570	13,579	11,249	7,127	5,142	2,965	4,260	3,818
SD	234	137	153	299	260	213	166	115	161	51	147	126
TN	650	883	734	3,085	3,404	2,529	2,276	1,472	1,239	748	1,131	969
TX	29,208	36,891	41,072	44,195	52,178	63,634	73,206	73,189	68,671	62,069	45,725	49,104
UT	3,649	4,295	4,698	4,917	4,565	4,441	2,374	2,584	1,064	886	1,736	1,660
VT	876	535	818	1,285	1,136	1,073	337	471	351	372	345	312
VA	46,123	43,274	40,015	40,108	41,171	37,371	34,020	24,704	13,072	9,591	10,068	9,109
WA	10,986	10,365	8,627	7,675	9,683	12,647	13,893	17,332	16,505	14,029	5,358	5,153
WV	1,448	1,709	1,847	4,146	4,039	3,082	1,982	1,465	1,001	1,443	1,190	1,074
WI	2,633	1,787	1,872	2,627	2,759	2,613	1,915	1,751	871	2,212	876	834
WY	1,542	2,091	2,020	2,664	2,527	3,090	2,182	1,630	2,009	1,634	401	380
TOT	1,030,177	963,216	898,572	1,025,148	1,120,927	1,103,233	1,034,610	937,466	762,028	626,510	518,604	501,199

Source: 1973-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1984 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July 1985.

U.S. DELIVERIES OF RESIDUAL FUEL OIL (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1985	1986	1987
Alabama	3,773	9,243	10,910
Alaska	896	5,125	1,363
Arizona	10	29	15
Arkansas	2,545	6,437	2,690
California	59,892	62,987	60,082
Colorado	214	1,040	211
Connecticut	23,414	14,272	20,900
Delaware	1,342	2,195	3,818
Dist. of Col.	509	780	582
Florida	32,515	48,576	36,668
Georgia	8,859	2,229	2,199
Hawaii	13,728	13,307	12,587
Idaho	414	85	390
Illinois	4,899	7,358	7,106
Indiana	4,712	5,201	3,782
Iowa	225	614	126
Kansas	95	571	345
Kentucky	779	893	897
Louisiana	45,953	37,339	43,913
Maine	3,687	9,481	7,451
Maryland	6,562	6,465	7,919
Massachusetts	30,046	47,932	38,772
Michigan	3,298	4,214	3,002
Minnesota	1,225	2,170	1,271
Mississippi	1,466	12,820	2,613
Missouri	920	879	950
Montana	640	201	140
Nebraska	77	241	337
Nevada	39	442	376
New Hampshire	804	5,428	4,481
New Jersey	37,754	36,911	20,639
New Mexico	2,755	1,638	589
New York	50,622	66,353	68,697
North Carolina	4,537	4,180	4,484
North Dakota	635	468	381
Ohio	2,740	2,779	2,162
Oklahoma	264	466	348
Oregon	4,352	5,724	4,348
Pennsylvania	13,153	19,039	18,179
Rhode Island	1,222	2,515	1,917
South Carolina	2,275	1,753	1,676
South Dakota	44	71	57
Tennessee	675	702	337
Texas	43,173	37,177	36,230
Utah	1,951	1,494	2,185
Vermont	88	298	240
Virginia	8,206	8,309	9,490
Washington	8,643	16,489	11,229
West Virginia	702	750	382
Wisconsin	456	1,245	1,242
Wyoming	1,016	803	726
U.S. Total	438,840	517,717	461,504

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly, July issues.

U.S. SALES OF RESIDUAL FUEL OIL BY USES
(Thousands of Barrels)

Year	Vessels Bunkering	Gas and Electrical Public-Utility Power Plants	Railroads	Oil Company Use	Industrial Use (Excluding Oil Companies)	Heating Oils	Military Use	Miscellaneous Uses	All Uses
1947	101,900	60,964	97,500	62,649	115,108	56,402	19,147	6,859	520,529
1948	95,763	56,812	89,588	56,637	117,780	58,639	24,655	6,623	506,497
1949	89,362	80,092	63,467	51,667	122,633	60,414	22,724	4,574	494,933
1950	92,947	93,062	60,878	53,263	148,111	72,716	28,333	4,898	554,208
1951	107,007	70,550	54,998	54,056	157,279	76,164	38,054	5,280	563,388
1952	110,412	70,497	40,489	54,421	158,373	79,151	37,185	5,745	556,273
1953	114,324	85,352	28,477	51,243	166,748	81,824	30,435	6,326	564,729
1954	108,790	70,749	16,122	52,165	160,121	78,845	26,887	7,035	520,714
1955	115,128	75,966	15,018	53,387	173,030	86,282	28,368	9,804	556,983
1956	117,445	73,962	10,575	53,271	177,807	87,601	30,546	10,331	561,538
1957	123,651	75,950	6,953	50,153	166,885	81,412	28,962	9,984	543,950
1958	106,269	76,995	5,772	46,463	143,142	105,639	37,428	9,659	531,367
1959(1)	102,049	82,208	5,613	46,177	167,701	111,850	31,415	7,339	554,352
1960(2)	94,084	85,408	5,610	45,061	157,270	125,088	31,724	6,291	550,536
1961	87,308	87,881	5,347	44,399	153,766	121,097	36,762	6,426	542,986
1962	84,415	88,261	5,501	45,978	156,221	125,164	35,667	7,226	548,433
1963	76,502	91,615	5,342	46,976	149,269	125,248	36,444	7,126	538,522
1964	83,024	97,595	5,350	43,098	157,176	126,215	35,568	8,606	556,632

(1) Includes Alaska
(2) Includes Hawaii

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annuals

Section VII
Table 12a

U.S. DELIVERIES OF RESIDUAL FUEL OIL BY USES
(Thousands of Barrels)

Year	Vessels Bunkering	Gas and Electrical Public-Utility Power Plants(1)	Railroads	Oil Company Use	Industrial Use (Excluding Oil Companies)	Heating Oils(3)	Military Use(2)	Miscel-laneous Uses	All Uses
1965	73,639	114,884	4,001	34,354	140,602	156,254	40,380	10,004	574,118
1966	63,641	140,642	3,792	35,177	141,050	167,471	41,861	10,338	613,972
1967	80,680	158,417	5,494	37,880	131,819	175,990	40,465	8,794	639,539
1968	87,575	184,956	4,296	39,329	135,664	174,326	34,990	8,348	669,484
1969	85,581	247,634	3,381	36,559	130,654	178,095	31,750	8,875	722,529
1970	89,850	312,420	2,222	38,318	139,647	185,831	28,704	7,295	804,287
1971	78,727	371,820	1,262	32,626	136,221	182,062	29,217	6,109	838,044
1972	77,932	435,348	1,137	44,291	142,320	191,111	24,622	8,886	925,647
1973	92,415	509,457	1,214	50,652	152,267	192,252	22,892	9,028	1,030,177
1974	91,052	475,204	1,176	50,236	143,726	172,896	20,423	8,503	963,216
1975	96,673	454,935	583	50,487	116,657	154,103	19,068	6,066	898,572
1976	117,458	492,974	423	58,212	153,596	178,139	18,561	5,785	1,025,148
1977	128,966	569,429	329	60,582	171,967	168,279	16,646	4,729	1,120,927
1978	157,495	533,193	206	57,690	169,403	164,536	16,583	4,127	1,103,233
1979	190,543	486,636	245	51,062	198,759	82,729(3)	7,736	16,900	1,034,610
1980	213,131	390,105	665	59,519	163,564	98,034	8,066	4,382	937,466
1981	188,632	325,486	178	51,870	117,024	67,035	7,008	4,795	762,030
1982	152,586	227,419	170	45,319	122,619	65,781	7,829	4,784	626,510
1983	136,290	204,238	47	28,604	93,624	35,979	5,411	14,412	518,604
1984	135,408	186,318	43	27,680	94,375	33,777	5,291	18,307	501,199
1985	130,323	147,238	148	18,477	95,509	31,592	4,593	10,962	438,840
1986	125,889	215,276	14	18,239	106,962	39,595	4,308	7,434	517,717
1987	125,221	181,712	7	11,967	90,723	42,013	4,549	5,314	461,504

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(1) Beginning with 1967, represented use by electric public-utility plants only.
(2) Includes imports by military.
(3) Beginning in 1979, heating oil has been reclassified commercial and is a part of the total called "heating and industrial."

Source: 1965-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1987 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--NAPHTHA TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand (2)
1965(1)	226	44	270	8,338	--	270	2	268
1966	245	35	280	7,235	-3	283	4	279
1967	300	15	315	9,037	+5	310	5	305
1968	332	19	351	8,904	--	351	5	346
1969	287	14	301	8,556	-1	302	5	297
1970	320	20	250	6,621	-5	255	6	249
1971	234	30	264	6,990	+1	263	3	260
1972	209	33	242	6,147	-2	244	2	242
1973	181	36	217	5,599	-2	219	2	217
1974	195	27	222	5,529	--	222	--	222
1975	180	28	208	5,222	-1	209	--	209
1976	187	15	202	6,495	+3	199	--	199
1977	186	21	207	6,285	-1	208	--	208
1978	179	19	198	5,958	-1	199	--	199
1979	176	22	198	5,599	-1	200	--	200
1980	188	31	219	6,308	+2	217	--	217
1981	193	7	200	7,054	+2	198	1	198
1982	201	5	206	5,667	-4	210	1	209
1983	205	1	206	6,265	-2	208	1	207
1984	213	14	227	6,861	+2	225	3	223
1985	206	9	215	6,654	-1	216	1	214
Jan.	185	19	204	6,415	-14	218	1	218
Feb.	195	9	204	6,183	-8	212	0	212
Mar.	189	17	206	6,767	+19	187	0	187
Apr.	222	3	225	6,205	-19	244	0	244
May	230	6	236	6,428	+7	229	0	228
Jun.	211	15	226	6,227	-7	233	0	232
Jul.	224	8	232	6,977	+24	208	0	207
Aug.	209	3	212	6,982	--	212	2	211
Sep.	206	0	206	6,857	-4	210	2	208
Oct.	203	13	216	6,738	-4	220	3	217
Nov.	209	9	218	6,793	+2	216	6	211
Dec.	189	2	191	6,654	-4	195	3	192

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(1) Data prior to 1965 ar not available on a comparable basis.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1985 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--NAPHTHA TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand(2)
1986	196	9	205	7,072	+1	204	1	202
Jan.	193	2	195	6,534	-4	199	0	200
Feb.	173	2	175	6,264	-10	185	1	183
Mar.	172	5	177	5,795	-15	192	1	191
Apr.	201	5	206	6,712	+31	175	5	171
May	197	15	212	6,513	-6	218	0	218
Jun.	209	9	218	6,581	+2	216	0	215
Jul.	203	16	219	6,099	-16	235	0	235
Aug.	197	8	205	6,609	+16	189	1	188
Sep.	197	6	203	6,700	+3	200	0	199
Oct.	202	7	209	6,764	+2	207	0	207
Nov.	202	11	213	6,901	+5	208	0	209
Dec.	203	21	224	7,072	+6	218	10	209
1987	204	3	207	7,956	+2	205	1	204
Jan.	174	6	180	7,631	+18	162	2	159
Feb.	194	3	197	7,141	-18	214	0	214
Mar.	187	6	193	7,031	-4	197	1	196
Apr.	202	3	205	7,183	+5	200	0	199
May	216	2	218	8,078	+29	189	0	189
Jun.	204	2	206	7,262	-27	233	0	233
Jul.	221	3	224	7,253	--	224	0	224
Aug.	208	3	211	6,981	-9	220	2	218
Sep.	204	2	206	6,506	-16	222	1	221
Oct.	219	4	223	7,097	+ 1	203	0	203
Nov.	217	4	221	7,043	- 2	223	2	221
Dec.	206	2	208	7,956	+29	179	4	175
1988								
Jan.	184	3	187	8,366	+13	173	0	173
Feb.	178	3	181	6,731	-56	237	0	237
Mar.	209	2	211	7,156	+14	197	0	197
Apr.	203	3	206	6,713	-15	221	0	221
May	229	4	233	7,397	+22	211	3	208
Jun.	208	3	211	6,750	-22	233	0	233
Jul.	209	3	212	6,710	- 1	213	0	213
Aug.	206	3	209	6,861	+ 5	205	1	204
Sep.	198	3	201	6,492	-12	213	7	206

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 14

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--KEROSINE TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1965(1)	298	37	335	10,361	--	335	1	334
1966	345	52	397	13,139	+ 5	392	1	391
1967	448	74	522	13,174	+ 3	519	1	518
1968	529	86	615	15,373	+ 6	609	--	609
1969	594	111	705	19,517	+11	694	--	694
1970	597	125	722	29,989	+ 4	718	--	718
1971	601	150	751	20,747	- 1	752	1	751
1972	638	162	800	19,346	- 3	803	--	803
1973	679	176	855	22,945	+10	845	3	842
1974	641	135	776	23,906	+ 3	773	2	771
1975	691	105	796	25,158	+ 3	793	2	791
1976	731	61	792	25,590	+ 1	791	2	789
1977	788	53	841	28,263	+ 8	833	2	831
1978	791	67	858	27,707	- 1	859	1	858
1979	835	56	891	32,921	+14	877	1	876
1980	811	49	860	35,723	+ 8	852	1	851
1981	775	31	806	34,011	- 5	811	1	809
1982	778	23	801	31,180	- 8	809	5	804
1983	817	29	846	32,346	+ 2	844	5	839
1984	919	48	967	35,118	+ 8	959	7	953
Jan.	870	51	921	29,234	-100	1,021	10	1,011
Feb.	938	110	1,048	32,929	+127	921	2	919
Mar.	893	38	931	33,917	+32	899	1	898
Apr.	871	42	913	34,056	+5	908	5	903
May	890	29	919	34,488	+14	905	1	905
Jun.	916	36	952	36,089	+52	899	6	892
Jul.	948	40	988	36,780	+22	966	10	956
Aug.	973	77	1,050	38,526	+56	994	2	992
Sep.	926	33	959	37,989	-18	977	1	977
Oct.	958	56	1,014	38,214	+7	1,007	5	1,002
Nov.	920	22	942	38,401	+6	936	11	924
Dec.	931	38	969	35,118	-106	1,075	24	1,051
1985	983	30	1,013	33,825	-4	1,017	12	1,005
Jan.	958	49	1,007	34,691	-14	1,021	3	1,018
Feb.	981	29	1,010	35,302	+22	988	22	966
Mar.	1,003	30	1,033	36,865	+50	983	6	976
Apr.	937	14	951	35,041	-61	1,012	5	1,007
May	915	24	939	35,924	+28	911	5	906
Jun.	914	20	934	36,537	+20	914	3	910
Jul.	954	43	997	36,037	-16	1,013	3	1,009
Aug.	966	9	975	34,681	-44	1,019	21	998
Sep.	989	34	1,023	35,187	+17	1,006	4	1,002
Oct.	1,036	42	1,078	35,558	+12	1,066	25	1,042
Nov.	1,090	32	1,122	36,408	+28	1,094	28	1,066
Dec.	1,051	35	1,086	33,825	-83	1,169	18	1,152

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(1) Data prior to 1965 are not available on a comparable basis.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1985 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 14a

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--KEROSINE TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1986	1,097	48	1,145	42,677	+24	1,121	16	1,105
Jan.	1,143	25	1,168	35,051	+40	1,128	38	1,090
Feb.	1,175	33	1,208	37,829	+99	1,109	15	1,093
Mar.	1,119	24	1,143	41,729	+126	1,017	11	1,007
Apr.	963	39	1,002	38,831	-97	1,099	12	1,086
May	1,004	39	1,043	38,807	-1	1,044	14	1,030
Jun.	1,066	76	1,142	39,703	+30	1,112	6	1,106
Jul.	1,084	106	1,190	42,481	+90	1,100	10	1,091
Aug.	1,072	77	1,149	41,884	-19	1,168	4	1,164
Sep.	1,093	54	1,147	42,233	+12	1,135	14	1,122
Oct.	1,112	31	1,143	43,853	+52	1,091	25	1,066
Nov.	1,125	48	1,173	43,237	-21	1,194	22	1,171
Dec.	1,210	28	1,238	42,677	-18	1,256	20	1,236
1987	1,138	64	1,202	41,973	-2	1,204	23	1,181
Jan.	1,192	37	1,229	42,116	-18	1,247	45	1,202
Feb.	1,135	64	1,199	41,154	-34	1,233	20	1,213
Mar.	1,095	77	1,172	41,044	-4	1,176	7	1,169
Apr.	1,052	62	1,114	39,977	-36	1,150	4	1,146
May	1,035	65	1,100	39,277	-23	1,123	4	1,118
Jun.	1,048	64	1,112	38,677	-20	1,132	5	1,127
Jul.	1,126	70	1,196	39,479	+26	1,170	4	1,165
Aug.	1,191	52	1,243	40,762	+41	1,202	2	1,199
Sep.	1,190	81	1,271	43,684	+97	1,174	34	1,139
Oct.	1,189	79	1,268	42,740	-30	1,298	35	1,264
Nov.	1,171	51	1,222	43,937	+40	1,182	45	1,138
Dec.	1,233	65	1,298	41,973	-63	1,361	74	1,288
1988								
Jan.	1,231	80	1,310	37,912	-131	1,441	81	1,360
Feb.	1,205	64	1,269	36,889	-35	1,304	34	1,270
Mar.	1,243	95	1,338	39,548	+86	1,252	52	1,200
Apr.	1,088	83	1,171	39,270	-9	1,180	13	1,167
May	1,060	101	1,161	39,392	+4	1,157	4	1,153
Jun.	1,133	71	1,204	38,990	-13	1,217	15	1,202
Jul.	1,155	78	1,233	40,297	+42	1,190	3	1,187
Aug.	1,138	100	1,238	39,971	-11	1,248	14	1,234
Sep.	1,178	59	1,237	40,317	+12	1,225	9	1,216

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals and Monthlies.

Section VII
Table 15

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	302	--	302	17,722	+ 1	301	20	281
1948	333	--	333	23,941	+17	316	9	307
1949	280	--	280	20,888	- 8	288	7	281
1950	325	--	325	19,723	- 3	328	5	323
1951	372	--	372	27,088	+16	356	19	337
1952	351	--	351	26,529	- 1	352	21	331
1953	337	--	337	28,684	+ 4	333	19	314
1954	335	--	335	27,826	- 2	337	13	324
1955	326	--	326	26,770	- 3	329	9	320
1956	342	--	342	31,420	+12	330	9	321
1957	303	--	303	29,200	- 6	309	14	295
1958	305	--	305	26,040	- 8	313	3	310
1959(1)	305	--	305	26,856	+ 1	304	3	301
1960(2)	374	--	374	31,445	+10	364	2	362
1961	391	8	399	32,433	+ 3	396	1	395
1962	431	18	449	31,725	- 2	451	1	450
1963	454	24	478	34,102	+ 4	474	2	472
1964	463	31	494	36,165	+ 6	488	--	488
1965(3)	259	--	259	24,080	- 9	268	1	267
1966	279	1	280	25,004	+ 2	278	1	277
1967(4)	274	--	274	25,366	--	274	--	274
1968	278	--	278	23,480	- 5	283	2	281
1969	282	3	285	26,780	+ 9	276	1	275
1970	262	4	266	27,848	+ 3	263	--	263
1971	240	1	241	24,438	- 9	250	1	249
1972	219	1	220	19,111	-16	236	--	236
1973	220	2	222	21,022	+ 6	216	--	216
1974	156	5	161	15,269	-15	176	--	176

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(1) These figures and those for subsequent years are on a 50 state basis.
(2) These figures and those through 1964 include commercial jet fuel.
(3) These figures and those for subsequent years exclude kerosine-type jet fuel.
(4) Beginning with 1967 production at refineries and at plants are combined in one total.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 15a

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1975	152	3	155	15,571	- 4	159	--	159
1976	152	9	161	12,514	- 8	169	--	169
1977	171	19	190	18,056	+15	175	--	175
1978	154	11	165	14,330	-10	175	--	175
1979	183	9	192	15,824	+ 4	189	--	189
1980	137	10	147	11,570	-12	159	--	159
1981	119	7	126	11,042	- 1	127	--	127
1982	115	13	128	10,420	- 2	130	1	129
1983	110	11	121	7,861	- 8	129	1	127
1984	114	12	126	11,893	+11	115	--	115
1985	94	8	102	7,502	-12	114	--	114
Jan.	100	10	110	7,905	-129	239	--	239
Feb.	135	12	147	7,124	-28	175	--	175
Mar.	97	4	101	8,095	+31	70	--	70
Apr.	69	0	69	7,926	-6	75	--	74
May	43	2	45	7,326	-19	64	--	64
Jun.	59	5	64	6,794	-18	82	--	81
Jul.	77	1	78	7,596	+26	52	--	52
Aug.	91	9	100	7,951	+11	89	--	89
Sep.	102	0	102	8,701	+25	77	--	76
Oct.	117	11	128	9,648	+31	97	--	97
Nov.	115	16	131	10,489	+28	103	1	102
Dec.	131	23	154	7,502	-96	250	--	250
1986	89	13	102	8,379	+2	100	2	98
Jan.	135	29	164	7,272	-7	171	1	170
Feb.	120	1	121	6,735	-19	140	--	140
Mar.	96	11	107	6,179	-18	126	--	125
Apr.	76	0	76	6,837	+22	54	1	54
May	47	2	49	6,258	-19	68	0	68
Jun.	45	0	45	6,652	+13	32	1	30
Jul.	62	7	69	6,881	+7	62	0	62
Aug.	73	26	99	6,859	-1	100	0	99
Sep.	91	16	107	8,344	+50	57	1	57
Oct.	91	14	105	8,277	-2	103	8	100
Nov.	107	19	126	8,502	+8	118	0	118
Dec.	131	30	161	8,379	-4	165	8	157

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1986 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1987	79	17	96	8,447	--	96	1	95
Jan.	128	33	161	8,515	+4	157	0	157
Feb.	79	36	115	7,578	-33	148	0	148
Mar.	61	9	70	6,523	-34	104	0	105
Apr.	46	9	55	6,851	+11	44	0	43
May	38	3	41	6,617	-8	49	0	48
Jun.	38	4	42	6,089	-18	60	0	60
Jul.	53	12	65	6,512	+14	51	0	51
Aug.	66	18	84	7,055	+18	66	1	65
Sep.	90	13	103	7,989	+31	72	0	72
Oct.	118	30	148	8,719	+24	125	0	125
Nov.	117	12	129	9,270	+18	111	1	110
Dec.	107	29	136	8,447	-27	163	10	153
1988								
Jan.	104	32	136	7,182	-41	176	0	176
Feb.	118	20	138	6,931	-9	146	4	142
Mar.	68	68	82	6,350	-19	101	1	101
Apr.	50	8	58	5,980	-12	69	0	69
May	48	2	50	5,597	-12	62	0	62
Jun.	55	9	64	5,963	+12	51	0	51
Jul.	64	0	64	6,710	+8	57	0	57
Aug.	81	8	89	7,131	+30	58	0	58
Sep.	78	13	91	7,468	+11	80	1	79

(1) Total may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 16

U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports(1)	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	413	--	413	4.295	- 2	415	17	398
1948	464	--	464	6,172	+ 3	461	14	447
1949	494	--	494	7,358	+ 2	491	15	476
1950	578	--	578	8,012	+ 2	576	7	569
1951	651	--	651	8,854	+ 2	649	10	639
1952	695	--	695	8,445	- 1	696	11	685
1953	745	--	745	11,220	+ 8	737	11	726
1954	785	--	785	14,979	+11	774	12	762
1955	890	--	890	14,596	- 1	891	12	879
1956	942	--	942	21,952	+20	922	12	910
1957	954	--	954	23,480	+ 4	950	13	937
1958	965	--	965	24,959	+ 8	957	8	949
1959(2)	1,067	--	1,067	27,407	+ 7	1,060	5	1,055
1960	1,141	5	1,146	32,554	+14	1,132	8	1,124
1961	1,207	5	1,212	43,365	+29	1,183	10	1,173
1962	1,232	6	1,238	36,154	-20	1,258	11	1,247
1963	1,359	7	1,366	37,633	+ 4	1,362	12	1,350
1964	1,446	11	1,457	39,371	+ 5	1,452	15	1,437
1965	1,502	21	1,523	39,542	--	1,523	22	1,501
1966	1,575	29	1,604	43,759	+12	1,592	24	1,568
1967	1,715	27	1,742	69,947	+74	1,668	25	1,643
1968	1,826	32	1,858	81,086	+32	1,826	29	1,797
1969	1,928	35	1,963	65,306	-45	2,008	35	1,973
1970	2,005	52	2,057	74,089	+25	2,032	27	2,005
1971	2,050	106	2,156	100,889	+73	2,083	26	2,057
1972	2,100	174	2,274	91,792	-25	2,299	31	2,268
1973	2,113	239	2,352	106,476	+41	2,311	27	2,284
1974	2,026	211	2,237	120,092	+37	2,200	25	2,175

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(1) Prior to 1960 figures included with gasoline.
(2) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 16a

TOTAL U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES

(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand(3)
1975	1,944	185	2,129	132,653	+34	2,095	26	2,069
1976	1,944	197	2,141	124,518	-22	2,163	25	2,138
1977	1,970	203	2,173	144,902	+56	2,117	18	2,099
1978	1,921	139	2,060	140,052	-42	2,101	20	2,081
1979	1,924	230	2,154	125,289	-40	2,187	15	2,172
1980	1,897	216	2,113	137,551	+34	2,079	21	2,058
1981	1,905	254	2,159	150,170	+11(1)	2,148	42	2,106
1982	1,809	247	2,056	105,077	-124	2,180	65	2,115
1983	1,875	205	2,080	116,532	+470	1,610	73	1,537
1984	1,989	241	2,230	108,446	- 22	1,752	51	1,702
1985	1,986	235	2,221	81,707	-73	1,785	64	1,721
Jan.	1,948	284	2,232	96,294	-424	2,127	72	2,055
Feb.	1,967	253	2,220	86,644	-309	2,005	74	1,931
Mar.	1,956	269	2,225	86,001	+21	1,752	52	1,700
Apr.	1,976	172	2,148	90,221	+141	1,538	80	1,458
May	1,995	221	2,216	96,365	+198	1,562	40	1,522
Jun.	2,016	250	2,266	101,922	+185	1,617	53	1,564
Jul.	2,001	190	2,191	105,910	+129	1,607	70	1,537
Aug.	2,000	182	2,182	108,896	+96	1,594	82	1,512
Sep.	1,954	188	2,142	106,667	-74	1,691	29	1,662
Oct.	1,950	271	2,221	97,102	-309	1,970	47	1,923
Nov.	2,001	220	2,221	91,816	-176	1,802	93	1,709
Dec.	2,063	322	2,385	81,707	-326	2,165	77	2,088
1986	1,963	265	2,228	109,532	+76	1,673	45	1,629
Jan.	2,128	303	2,431	78,770	-95	1,995	47	1,948
Feb.	2,094	224	2,318	76,170	-93	1,915	80	1,834
Mar.	1,965	220	2,185	78,231	+66	1,689	51	1,638
Apr.	1,904	156	2,060	84,220	+200	1,418	36	1,383
May	1,962	221	2,183	95,798	+373	1,362	43	1,320
Jun.	1,919	302	2,221	111,458	+522	1,296	25	1,271
Jul.	1,961	315	2,276	126,110	+473	1,435	53	1,382
Aug.	1,889	281	2,170	134,938	+285	1,458	56	1,402
Sep.	1,901	314	2,215	138,796	+129	1,609	29	1,581
Oct.	1,888	276	2,164	131,785	-226	1,889	26	1,864
Nov.	1,985	322	2,307	122,639	-305	2,018	58	1,958
Dec.	1,976	238	2,214	109,532	-423	2,008	35	1,972

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(1) The U.S. Department of Energy altered its stock reporting base as of January 1981. On the new basis, year-end 1980 stocks were 146,145 thousand barrels. This figure was used to compute the 1981 stock change.
(2) Total demand excludes volume used as refinery inputs.
(3) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 16b

TOTAL U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(2)
1987	2,040	201	2,241	104,119	-15	1,789	40	1,749
Jan.	2,014	203	2,217	94,979	-502	2,143	46	2,097
Feb.	2,035	215	2,250	88,728	-188	1,948	40	1,908
Mar.	2,037	145	2,182	88,569	-5	1,756	54	1,701
Apr.	2,049	170	2,219	92,705	+138	1,658	39	1,619
May	2,023	147	2,170	101,897	+297	1,444	36	1,408
Jun.	2,035	131	2,166	107,974	+203	1,559	22	1,537
Jul.	2,070	201	2,271	112,761	+154	1,693	32	1,661
Aug.	2,020	199	2,219	120,211	+240	1,548	35	1,513
Sep.	2,034	289	2,323	122,768	+ 85	1,812	58	1,754
Oct.	2,040	241	2,281	120,373	- 77	1,889	23	1,866
Nov.	2,067	243	2,310	116,176	-140	1,927	37	1,890
Dec.	2,051	227	2,278	104,119	-389	2,106	59	2,047
1988								
Jan.	2,018	237	2,255	87,872	-526	2,266	47	2,219
Feb.	2,052	263	2,315	77,044	-373	2,191	49	2,142
Mar.	2,106	176	2,282	76,427	-20	1,871	38	1,833
Apr.	2,093	216	2,309	88,265	+395	1,512	45	1,467
May	2,111	174	2,285	98,676	+336	1,537	39	1,498
Jun.	2,108	152	2,260	109,377	+357	1,512	40	1,472
Jul.	2,141	234	2,375	121,667	+396	1,591	37	1,554
Aug.	2,165	261	2,426	130,481	+284	1,719	52	1,667
Sep.	2,145	200	2,345	131,694	+40	1,904	45	1,859

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(1) Total demand excludes volume used as refinery inputs.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 17

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	141	--	141	8,624	+ 2	139	41	98
1948	140	--	140	9,843	+ 5	135	37	98
1949	124	--	124	9,219	- 2	126	35	91
1950	141	--	141	7,849	- 4	145	39	106
1951	168	--	168	9,617	+ 4	164	48	116
1952	151	--	151	11,021	+ 3	148	44	104
1953	144	--	144	10,070	- 2	146	35	111
1954	145	--	145	9,702	- 1	146	41	105
1955	153	--	153	8,763	- 3	156	39	117
1956	161	--	161	10,183	+ 3	158	38	120
1957	152	--	152	10,864	+ 1	151	38	113
1958	140	--	140	9,687	- 3	143	35	108
1959(1)	154	--	154	8,950	- 2	156	38	118
1960	162	--	162	9,874	+ 2	160	43	117
1961	162	--	162	12,943	+ 2	160	47	113
1962	168	--	168	13,130	--	168	48	120
1963	173	--	173	14,321	+ 3	170	50	120
1964	174	--	174	14,062	- 1	175	50	125
1965	172	--	172	13,304	- 2	174	45	129
1966	179	--	179	12,682	- 2	181	47	134
1967	178	--	178	14,774	+ 6	172	51	121
1968	180	--	180	14,023	- 2	182	49	133
1969	178	1	179	14,088	--	179	45	134
1970	181	1	182	14,712	+ 2	180	44	136
1971	179	--	179	15,049	+ 1	178	43	135
1972	179	1	180	13,271	- 5	185	41	144
1973	188	6	194	12,186	- 3	197	35	162
1974	194	5	199	16,060	+11	188	33	155

(1) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 17a

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1975	154	3	157	14,337	-5	162	25	137
1976	169	4	173	12,274	-5	178	26	152
1977	177	9	186	12,095	0	186	26	160
1978	190	8	198	12,233	-	198	27	171
1979	194	9	203	12,549	+1	202	23	179
1980	178	7	185	13,483	+3	182	23	160
1981	166	8	174	14,304	+2	172	19	153
1982	141	10	151	12,531	-5	156	16	140
1983	147	11	158	12,080	-3	162	16	146
1984	159	13	172	12,724	+2	170	15	156
1985	145	13	158	11,827	-2	160	15	145
Jan.	145	12	157	12,931	+7	150	14	136
Feb.	149	18	167	12,700	-8	175	12	163
Mar.	147	11	158	12,462	-8	166	16	151
Apr.	149	9	158	11,937	-18	176	13	162
May	153	20	173	11,938	+2	173	14	159
Jun.	156	14	170	12,203	+9	161	9	151
Jul.	149	10	159	12,469	+9	150	13	138
Aug.	152	16	168	12,220	-8	176	17	160
Sep.	154	6	160	12,456	+8	152	15	138
Oct.	150	15	165	12,165	-9	174	20	154
Nov.	114	12	126	11,556	-20	146	21	125
Dec.	126	9	135	11,827	+9	126	17	109
1986	159	12	171	14,164	+6	165	23	142
Jan.	161	16	177	14,431	+84	93	19	74
Feb.	168	11	179	14,916	+17	162	20	141
Mar.	145	12	157	14,029	-29	186	21	165
Apr.	162	19	181	14,060	+1	180	21	159
May	173	14	187	13,982	-3	190	21	169
Jun.	160	9	169	13,586	-13	182	17	166
Jul.	145	14	159	13,255	-11	170	27	142
Aug.	161	5	166	13,279	+1	165	23	141
Sep.	163	10	173	13,015	-9	182	21	161
Oct.	154	14	168	12,511	-16	184	30	154
Nov.	167	14	181	13,282	+26	155	25	130
Dec.	155	4	159	14,164	+28	131	25	126

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1986 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1987	167	14	181	13,271	- 2	184	23	161
Jan.	163	13	176	14,249	+3	173	17	156
Feb.	158	16	174	13,691	-20	194	25	168
Mar.	161	12	173	12,953	-24	197	24	173
Apr.	172	14	186	12,455	-17	203	22	180
May	159	9	168	12,122	-11	180	25	154
Jun.	176	17	193	11,675	-15	208	24	184
Jul.	171	23	194	11,705	+1	193	28	165
Aug.	168	13	181	11,900	+ 6	175	22	153
Sep.	171	16	187	12,169	+9	178	21	157
Oct.	173	12	185	12,620	+15	170	21	150
Nov.	173	14	187	13,648	+34	153	22	130
Dec.	156	13	169	13,271	-12	181	22	160
1988								
Jan.	167	11	178	14,076	+24	154	18	136
Feb.	174	12	186	13,882	-7	193	20	173
Mar.	189	13	202	13,872	-	202	24	178
Apr.	178	12	190	14,067	+7	183	32	151
May	181	12	193	13,847	-7	201	24	177
Jun.	182	6	188	13,897	+2	187	33	154
Jul.	169	10	179	14,023	+4	174	24	150
Aug.	170	2	172	13,638	-12	185	25	160
Sep.	144	11	155	12,515	-37	192	28	164

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1984

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	526	67	593	20,378	+3	596	5	588
Propane (1)	807	67	874	57,803	-7	867	30	833
Normal Butane (1)	265	37	302	13,681	+18	320	10	143
Isobutane (1)	99	24	123	8,987	+5	128	3	7
Total LPG's (1)	1,697	195	1,892	100,849	+19	1,911	48	1,572
Pentanes Plus (1)	292	46	338	7,597	+3	341	3	129
Total NGL's & LRG's (1)	1,989	241	2,230	108,446	+22	2,252	51	1,702
Petrochemicals	351	33	384	3,347	--	384	21	364
Lubricants	159	13	172	12,724	-2	170	15	156
Asphalt & Road Oil	386	18	404	17,183	+4	408	1	408
Petroleum Coke	439	0	439	4,839	+2	441	193	247
Miscellaneous Products	711	66	777	8,477	-1	776	4	773
Total Other Oils (1)	4,035	371	4,406	155,016	+25	4,431	285	3,650

1985

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	507	48	555	11.765	+24	579	3	573
Propane (1)	813	67	880	39,474	+50	930	48	880
Normal Butane (1)	276	43	319	14,157	-1	318	9	153
Isobutane (1)	109	29	130	7,313	+5	135	2	8
Total LPG's (1)	1,704	187	1,891	72,709	+77	1,968	62	1,614
Pentane Plus (1)	289	51	340	8,189	-2	338	2	135
Total NGL's & LRG's (1)	1,992	239	2,231	80,898	+76	2m307	64	1,749
Petrochemicals	357	23	380	3,116	+1	381	19	361
Lubricants	145	11	156	11,657	+3	159	15	144
Asphalt & Road Oil	398	33	431	21,207	-11	420	0	420
Petroleum Coke	453	0	453	6,159	-4	449	187	262
Miscellaneous Products	737	38	775	8,620	--	775	3	773
Total Other Oils (1)	4,082	344	4,426	131,657	+65	4,491	288	3,709

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(1) The discrepancy between total demand minus exports equals domestic demand is accounted for by refinery inputs, which are not shown here.

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1984 and Petroleum Supply Monthly December for 1985

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1986

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	493	19	512	15,421	+10	502	5	495
Propane (1)	817	110	927	62,852	+64	866	28	831
Normal Butane (1)	253	68	321	15,859	+2	321	7	146
Isobutane (1)	133	45	178	8,526	+3	175	2	41
Total LPG's (1)	1,694	242	1,936	102,658	+80	1,856	42	1,512
Pentanes Plus (1)	269	23	292	6,874	-4	296	2	116
Total NGL's & LRG's (1)	1,963	265	2,228	109,532	+76	2,152	45	1,629
Petrochemicals	404	85	489	3,986	+3	486	18	465
Lubricants	159	12	171	14,164	+6	165	23	142
Asphalt & Road Oil	410	29	439	17,707	-10	449	1	448
Petroleum Coke	506	0	506	6,030	--	506	238	268
Miscellaneous Products(3)	776	20	796	7,720	+5	791	3	789
Total Other Oils (1)	4,218	391	4,609	159,539	+80	4,549	327	3,741

1987

	Production	Imports	New Supply	Stocks as of December 31(mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane(1)	509	3	512	22,261	+19	493	4	486
Propane(1)	828	88	916	47,792	-41	957	24	924
Normal Butane(1)	260	60	320	16,542	+2	318	8	151
Isobutane(1)	152	40	192	10,499	+5	187	2	50
Total LPG's(1)	1,749	190	1,939	97,094	-15	1,954	38	1,612
Pentanes Plus(1)	291	11	302	7,025	--	302	2	138
Total NGL's & LRG's(1)	2,040	201	2,241	104,119	-15	2,256	40	1,749
Petrochemicals	384	79	463	3,938	-1	463	20	443
Lubricants	167	14	181	13,271	-2	184	23	161
Asphalt & Road Oil	434	36	470	18,799	+3	468	1	467
Petroleum Coke	512	1	513	6,750	+2	512	213	299
Miscellaneous Products	783	23	806	8,278	+2	805	5	800
Total Other Oils(1)	4,320	354	4,674	155,155	-11	4,688	302	3,919

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(1) The discrepancy between total demand minus exports equals domestic demand is acccunted for by refinery inputs, which are not shown here.

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.

Section VII
Table 19

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks	Year's High		Year's Low		Strategic Petroleum Reserve Stocks
		Date	Stocks	Date	Stocks	
1960	239,800	Apr. 30	266,178	Sept. 30	231,966	
1961	244,644	May 31	261,440	Feb. 28	232,063	
1962	252,011	Nov. 30	256,284	Feb. 28	240,166	
1963	237,361	May 31	255,666	Dec. 31	237,361	
1964	230,057	May 31	257,322	Dec. 31	230,057	
1965	220,289	May 31	255,071	Dec. 31	220,289	
1966	238,391	June 30	253,388	Jan. 31	220,302	
1967	248,970	May 31	268,845	Dec. 31	248,970	
1968	272,193	Dec. 31	272,193	Jan. 31	244,946	
1969	265,227	June 30	284,544	Sept. 30	262,528	
1970	276,367	May 31	284,824	Aug. 31	254,144	
1971	259,648	May 31	284,320	Dec. 31	259,648	
1972	246,395	May 31	279,490	Dec. 31	246,395	
1973	242,478	May 31	257,867	Feb. 28	235,362	
1974	265,020	Nov. 30	271,144	Jan. 31	233,035	
1975	271,354	Apr. 30	281,908	Aug. 31	256,616	
1976	285,471	Nov. 30	298,836	Aug. 31	277,272	
1977(1)	339,857	Nov. 30	345,197	Feb. 28	291,462	7,826
1978	309,421	Mar. 31	345,482	Dec. 31	309,421	66,860
1979	339,074	Nov. 30	347,415	Jan. 31	302,059	91,191
1980	358,166	Aug. 31	387,223	Jan. 31	357,500	107,800
1981	363,464	Apr. 30	397,497	Sept. 30	355,982	230,341
1982	349,730	Feb. 28	371,762	Sept. 30	340,675	293,827
1983	343,850	Feb. 28	363,265	July 31	335,131	379,089
1984	345,376	May 31	358,995	Sept. 30	325,207	450,505

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(1) Stocks were first reported for the Strategic Petroleum Reserve (SPR) in October, 1977. SPR stocks are included neither in the December 31 levels nor the year's highs and lows but are reported separately in the last column.

Source: 1960-1975: U.S. Department of Interior, Annual Petroleum Statements.
1975-1984: U.S. Department of Energy, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 19a

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks(1)	Year's High(1)		Year's Low(1)		Strategic Petroleum Reserves Stocks
		Date	Stocks	Date	Stocks	
1985	320,892	May 31	356,630	Oct. 31	313,687	493,316
Jan.	336,127					457,409
Feb.	321,509					460,138
Mar.	329,624					461,617
Apr.	341,908					464,940
May	356,630					471,930
Jun.	344,058					476,571
Jul.	326,977					483,538
Aug.	318,474					487,126
Sep.	317,365					489,255
Oct.	313,687					489,881
Nov.	320,943					491,464
Dec.	320,892					493,316
1986	331,224	Oct. 31	343,892	June 30	326,654	511,565
Jan.	331,677					494,392
Feb.	331,724					495,381
Mar.	340,900					496,892
Apr.	337,791					498,781
May	328,640					499,877
Jun.	326,654					501,787
Jul.	341,798					503,400
Aug.	332,713					504,974
Sep.	337,799					506,385
Oct.	343,892					507,514
Nov.	339,084					509,471
Dec.	331,224					511,565
1987	348,995	Nov. 30	363,637	July 31	323,750	540,648
Jan.	333,029					514,910
Feb.	331,858					516,709
Mar.	332,451					519,987
Apr.	328,957					521,983
May	324,703					525,129
Jun.	327,598					527,187
Jul.	323,750					530,012
Aug.	332,468					531,978
Sep.	337,164					533,890
Oct.	355,894					535,652
Nov.	363,637					538,547
Dec.	348,995					540,648

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(1) December 31 stocks (stocks at month-end and year-end) and year's highs and lows exclude crude held in the SPR.

Source: U.S. Department of Energy, Petroleum Supply Annuals.

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

	December 31	Year's High(1)		Year's Low(1)		Strategic Petroleum
Year	Stocks(1)	Date	Stocks	Date	Stocks	Reserves Stocks
1988						
Jan.	345,479					542,720
Feb.	347,835					544,146
Mar.	353,625					544,938
Apr.	357,131					547,258
May	357,724					547,949
Jun.	359,001	Jun 30	359,001			550,056
Jul.	349,330					551,344
Aug.	333,170					552,145
Sep.	328,448			Sep. 30	328,448	554,659

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(1) Stocks at month-end and year-end and year's highs and lows exclude crude oil held in the SPR.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthlies.

TWENTY LEADING COMPANIES MOTOR GASOLINE SALES(1)
(Millions of Gallons)

1970		1980		1983		1984	
Company	Sales	Company	Sales	Company	Sales	Company	Sales
Texaco	7,300.0	Exxon	7,930.6	Standard of Indiana	7,419.4	Chevron(10)	10,396.1
Shell	7,050.0	Shell	7,913.8	Shell	7,180.3	Standard of Indiana	7,714.5
Standard of New Jersey	6,656.0	Standard of Indiana	7,790.6	Exxon	7,066.9	Texaco(11)	7,693.7
Standard of Indiana	6,557.0	Mobil	6,329.2	Texaco	5,937.2	Shell	7,252.6
Gulf	6,398.0	Texaco	6,262.4	Mobil	5,768.3	Exxon	7,112.7
Mobil	5,921.0	Standard of California	6,073.8	Gulf	5,427.5	Mobil	5,786.5
Atlantic Richfield	4,979.0	Gulf	5,670.9	Standard of California	5,167.5	Atlantic Richfield	5,085.6
Standard of California	4,161.0	Atlantic Richfield	4,067.5	Atlantic Richfield	4,857.7	Unocal	3,687.0
Sun	3,721.0	Union	3,681.9	Unocal(7)	3,584.6	Phillips	2,902.5
Phillips	3,559.0	Phillips	2,978.4	Phillips	2,730.9	U.S. Steel	2,733.3
Union	2,950.0	Sun	2,888.4	Sun	2,669.9	Sun	2,654.8
Standard of Ohio(2)	2,569.0	Marathon	2,278.6	U.S. Steel	2,295.3	Southland	2,422.8
Continental(3)	2,107.0	Standard of Ohio-BP	2,227.6	Southland(8)	2,235.8	DuPont	2,053.6
Cities Service	1,839.0	Conoco	1,864.1	Standard of Ohio	2,004.5	Standard of Ohio	1,955.2
Marathon	1,552.0	Ashland	1,768.6	DuPont	1,981.5	Ashland	1,662.8
Ashland(4)	1,283.0	Getty	1,565.2	Ashland	1,715.9	Tosco	1,166.0
Getty(5)	1,108.0	Cities Service	1,517.9	Getty	1,278.4	Diamond Shamrock	1,005.6
Tenneco	838.0	Clark	1,195.8	Tosco	1,162.2	American Petrofina	990.6
Kerr-McGee(6)	690.0	Tosco	960.2	Diamond Shamrock(9)	944.2	Tenneco	793.3
Murphy	677.0	Tenneco	928.7	American Petrofina	913.5	Total	734.3
U.S. TOTAL	89,862.0	U.S. TOTAL	105,228.5	U.S. TOTAL	102,215.6	U.S. TOTAL	105,066.5

(1) Sales data represent net taxable gasoline gallonage sold in the U.S. by all petroleum marketers, including non-retail sales by suppliers, cooperatives, etc.
(2) Includes sales of subsidiaries BP Oil and Boron.
(3) Includes sales under the brand names of Douglas, Kayo and Onco.
(4) Includes sales of subsidiary Northwestern Refining Company.
(5) Includes all sales by Skelly Oil Company.
(6) Includes sales under the brand name Triangle.
(7) Unocal Corporation is the parent of Union Oil Company of California.
(8) Includes Cities Service. Southland acquired the refining, marketing and transportation sections of Citgo Petroleum Corp., a subsidiary of Occidental, on September 1, 1983.
(9) Diamond Shamrock acquired Sigmor in September 1983.
(10) Standard Oil of California acquired the Gulf Corporation on June 15, 1984 and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure reflects this acquisition.
(11) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figures reflects this acquisition.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

Section VII
Table 20a

TWENTY LEADING COMPANIES
MOTOR GASOLINE SALES(1)
(Millions of Gallons)

1985		1986	
Company	Production	Company	Production
Chevron	8,399.5	Shell	8,648.8
Amoco (Standard of Indiana)	8,085.3	Amoco	8,322.4
Shell	7,694.6	Exxon	7,805.8
Exxon	7,472.0	Chevron(2)	7,574.1
Texaco	7,026.9	Mobil	7,131.9
Mobil	6,485.4	Texaco	7,100.0
Atlantic Richfield	4,305.2	Unocal	4,068.7
Union	3,941.1	Standard Oil	3,747.4
Standard Oil (Ohio)(2)	3,799.4	Phillips	3,244.9
Phillips	3,180.7	ARCO	2,887.3
Sun	2,659.8	Southland	2,816.4
Southland	2,500.1	Sun	2,764.2
U.S. Steel	2,480.7	USX (U.S. Steel)	2,744.8
DuPont	2,067.7	DuPont	2,246.4
Ashland	1,697.7	Ashland	1,846.6
American Petrofina	978.7	Diamond Shamrock	1,045.5
Diamond Shamrock	973.9	American Petrofina	969.1
Tenneco	887.0	Tenneco	912.6
Total Petroleum	739.9	Getty Petroleum	803.8
Tosco	721.2	Coastal(4)	762.4

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(1) This data represents net taxable gallonage sold in the U.S. by all petroleum marketers, including non-retail sales by suppliers, cooperataives, etc.

(2) Because they are under common control, sales for Standard of Ohio and BP are combined.

(3) During 1986 Chevron sold most of its petroleum marketing and distribution assets in ten northwestern states and Ohio. The primary purchaser of these operations was Cumberland Farms, Inc.

(4) Includes sales under brand names Derby and Belcher.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1986, Discussion Paper #014R.

1986 U.S. OIL PRODUCT CONSUMPTION BY STATE
(In Thousands of Barrels)

State	Motor Gasoline	Aviation Fuels	Middle Distillates	Residual Fuel Oil	Asphalt	Propane	All Other	Total Products
Alabama	43,423	2,974	18,023	2,099	3,739	2,803	9,551	82,612
Alaska	6,391	14,198	8,339	2,738	400	442	4,249	36,757
Arizona	38,437	4,282	8,894	1,089	2,714	943	7,367	63,726
Arkansas	26,645	589	11,456	482	1,053	3,004	5,651	48,880
California	307,521	59,832	81,582	56,330	16,487	11,804	69,746	603,302
Colorado	40,415	7,488	10,589	714	3,315	2,866	8,547	73,934
Connecticut	29,414	1,164	13,690	23,906	2,278	1,210	9,368	81,030
Delaware	9,177	115	7,172	1,115	653	109	2,398	20,739
Dist. of Columbia	3,482	337	3,245	844	22	60	1,044	9,034
Florida	129,989	19,101	30,689	38,299	8,837	7,194	30,603	264,712
Georgia	75,062	15,451	22,002	3,321	6,049	4,921	16,576	143,382
Hawaii	8,125	7,585	2,918	14,269	292	345	4,384	37,918
Idaho	10,677	412	5,052	2,190	583	475	2,535	21,924
Illinois	93,336	1,568	29,489	2,020	6,633	6,284	18,213	157,543
Indiana	59,374	17,430	29,037	2,191	6,503	4,700	15,586	134,821
Iowa	34,432	589	16,799	2,292	2,185	6,358	8,190	70,845
Kansas	55,623	6,351	30,452	1,595	2,849	33,057	16,984	146,911
Kentucky	41,993	3,121	19,022	519	2,451	3,271	9,200	79,577
Louisiana	62,470	16,393	44,829	29,956	1,921	11,385	21,824	188,778
Maine	12,485	533	7,438	7,490	787	574	3,831	33,138
Maryland	44,522	2,540	18,362	7,802	5,600	1,354	10,481	90,661
Massachusetts	54,027	6,489	40,468	35,188	1,195	1,536	18,157	157,060
Michigan	99,100	5,441	25,624	1,834	3,629	9,304	18,946	163,878
Minnesota	53,481	7,355	22,247	1,498	5,878	6,090	12,621	109,170
Mississippi	34,752	3,600	19,921	276	2,042	9,039	9,102	78,732
Missouri	60,041	6,248	17,948	376	4,690	4,213	12,260	106,046
Montana	11,301	1,041	6,189	56	2,133	1,388	2,890	24,998
Nebraska	17,525	556	11,919	1,061	1,023	2,641	4,539	39,264
Nevada	14,164	3,588	5,892	475	608	693	3,323	28,743
New Hampshire	6,235	132	6,875	2,910	593	953	2,313	20,011
New Jersey	117,614	37,025	81,346	33,345	5,968	2,808	36,354	314,460
New Mexico	18,274	1,005	8,358	544	1,733	5,032	4,568	39,514
New York	118,974	2,449	64,259	56,077	6,905	5,649	33,244	287,557
North Carolina	74,770	4,843	28,705	6,446	4,861	5,729	16,386	141,740
North Dakota	9,152	256	7,893	945	941	2,923	2,890	25,000
Ohio	110,739	8,964	39,899	2,322	7,873	4,238	22,750	196,785
Oklahoma	48,808	3,558	18,269	1,082	3,519	5,959	10,614	91,814
Oregon	30,377	2,344	15,784	2,917	2,386	1,350	7,210	62,368
Pennsylvania	113,535	9,091	57,521	29,135	6,388	5,043	28,852	249,565
Rhode Island	10,799	461	8,132	3,264	1,586	342	3,214	27,798
South Carolina	36,277	816	11,914	2,577	2,218	2,771	7,395	63,968
South Dakota	8,881	264	5,537	652	874	1,383	2,299	19,890
Tennessee	64,586	5,468	27,092	725	4,459	2,434	13,695	118,459
Texas	317,041	77,699	142,024	37,371	14,634	67,144	85,741	741,654
Utah	18,735	3,316	7,066	632	1,389	1,088	4,213	36,439
Vermont	2,481	258	2,582	358	449	578	877	7,583
Virginia	65,933	9,806	30,139	8,299	4,766	2,806	15,915	137,664
Washington	50,284	14,336	28,613	10,956	2,578	2,081	14,229	123,077
West Virginia	14,327	186	6,288	1,111	606	350	2,989	25,857
Wisconsin	48,111	1,334	21,215	211	2,204	5,293	10,244	88,612
Wyoming	7,022	138	7,594	353	1,721	4,726	2,818	24,372
TOTAL U.S.	2,770,338	400,122	1,196,390	444,256	175,472	268,980	687,007	5,942,565

Sources: Energy Information Administration and The Asphalt Institute.

Section VII
Table 21a

1987 U.S. OIL PRODUCT CONSUMPTION BY STATE
(In Thousands of Barrels)

State	Motor Gasoline	Aviation Fuels	Middle Distillates	Residual Fuel Oil	Asphalt	Propane	All Other	Total Products
Alabama	45,821	3,086	20,834	2,002	5,015	3,072	12,359	92,189
Alaska	5,866	15,119	7,328	11,586	264	217	6,252	46,632
Arizona	37,872	5,859	8,716	9	2,561	960	8,666	64,643
Arkansas	28,459	939	12,906	97	1,046	3,207	7,223	53,877
California	317,257	76,967	82,662	49,462	16,914	11,180	85,840	640,282
Colorado	39,118	8,008	9,904	281	3,197	2,656	9,779	72,943
Connecticut	31,714	1,589	13,311	24,806	2,198	1,156	11,577	86,351
Delaware	6,549	5,110	4,321	1,543	627	1,268	3,006	22,424
Dist. of Columbia	3,927	0	3,001	367	271	0	1,171	8,737
Florida	137,148	19,962	32,650	35,629	8,262	7,267	37,299	278,217
Georgia	76,881	17,254	23,122	2,424	6,501	5,364	20,366	151,912
Hawaii	7,869	8,883	2,993	14,947	408	436	5,502	41,038
Idaho	10,652	452	5,033	21	513	441	2,649	19,761
Illinois	96,755	1,536	29,230	2,552	6,490	7,253	22,266	166,082
Indiana	58,340	17,765	28,900	1,541	7,810	4,430	18,391	137,177
Iowa	32,427	657	16,430	17	1,838	4,448	8,642	64,459
Kansas	55,490	3,595	27,583	706	2,686	23,919	17,646	131,625
Kentucky	42,985	4,219	20,133	392	2,776	3,070	11,391	84,966
Louisiana	63,182	25,091	43,711	32,520	2,338	11,371	27,591	205,804
Maine	13,739	632	7,221	10,530	948	517	5,200	38,787
Maryland	43,862	2,367	18,274	6,913	5,043	1,370	12,050	89,879
Massachusetts	59,305	7,127	46,468	36,073	1,520	1,566	23,542	175,601
Michigan	97,689	6,389	23,122	1,600	3,883	9,131	21,956	163,770
Minnesota	45,702	6,726	16,928	993	6,022	4,547	12,528	93,440
Mississippi	35,799	6,382	21,048	639	2,234	8,661	11,575	86,338
Missouri	58,789	6,758	17,412	776	4,472	4,391	14,336	106,934
Montana	11,146	1,850	5,890	115	1,814	1,189	3,407	25,411
Nebraska	17,630	856	11,585	0	1,276	2,429	5,229	39,005
Nevada	14,299	3,939	6,160	210	888	711	4,057	30,264
New Hampshire	7,391	156	8,162	1,894	801	929	2,993	2,326
New Jersey	99,754	39,400	73,040	32,792	5,751	2,855	39,262	292,854
New Mexico	18,509	1,317	8,835	114	2,126	4,823	5,531	41,255
New York	118,538	2,539	56,692	54,420	7,095	5,046	37,828	282,158
North Carolina	76,698	5,189	30,056	6,544	4,407	6,015	19,958	148,867
North Dakota	8,362	427	6,980	245	976	3,032	3,100	23,122
Ohio	105,839	10,404	38,737	1,870	10,024	4,685	26,561	198,120
Oklahoma	50,427	6,758	18,494	999	2,805	5,919	13,222	98,624
Oregon	31,150	2,543	15,926	2,358	2,200	1,225	8,633	64,395
Pennsylvania	112,646	9,545	54,576	21,280	7,240	5,496	32,634	243,417
Rhode Island	12,986	594	7,976	2,565	1,938	369	4,092	30,520
South Carolina	37,433	796	12,513	2,800	2,660	2,992	9,165	68,359
South Dakota	8,719	1,013	5,305	2	693	951	2,583	19,266
Tennessee	64,997	5,077	27,443	421	5,105	2,486	16,338	121,867
Texas	304,142	92,323	132,089	33,923	12,950	76,497	100,932	752,856
Utah	18,866	4,717	7,589	642	1,468	1,119	5,326	39,727
Vermont	2,752	26	2,113	276	537	511	962	7,177
Virginia	66,434	10,834	30,366	9,522	4,832	2,373	19,254	143,615
Washington	54,136	16,103	24,984	9,816	2,331	1,993	16,932	126,295
West Virginia	15,077	194	7,002	958	551	288	3,727	27,797
Wisconsin	48,264	1,156	20,169	231	2,462	3,831	11,784	87,897
Wyoming	7,297	245	8,034	407	1,510	3,009	3,174	23,676
TOTAL U.S.	2,767,044	470,473	1,163,959	422,832	180,279	262,668	815,487	6,082,742

Source: Department of Energy, Energy Information Administration and The Asphalt Institute.

HISTORICAL U.S. OIL CONSUMPTION: 1918-1946
Total and Major Product
(Thousands of Barrels)

Year	Total Consumption	Motor Fuels(1)	Distillate	Residual	Kerosine	Other
1918	NA	79,949	142,751(2)	(2)	34,442	14,564
1919	374,586	88,648	163,803(2)	(2)	33,188	88,947
1920	455,806	108,945	185,972(2)	(2)	33,082	127,807
1921	457,560	116,840	195,656(2)	(2)	29,537	115,527
1922	530,975	137,770	237,063(2)	(2)	34,851	121,291
1923	652,114	174,462	261,388(2)	(2)	35,536	180,728
1924	687,540	196,586	290,766(2)	(2)	36,712	163,476
1925	727,178	232,745	307,033(2)	(2)	39,969	147,431
1926	780,755	268,128	339,572(2)	(2)	38,140	134,915
1927	803,177	305,367	339,265(2)	(2)	37,491	121,054
1928	860,241	338,881	383,974(2)	(2)	36,235	101,151
1929	940,581	382,878	415,156(2)	(2)	36,032	106,515
1930	926,642	397,609	368,531(2)	(2)	34,736	125,766
1931	902,593	403,843	334,668(2)	(2)	31,358	132,724
1932	825,230	377,791	65,101	243,056	33,221	116,061
1933	868,200	380,494	64,748	258,957	38,493	125,508
1934	919,838	410,339	74,824	265,547	44,234	124,894
1935	983,317	434,810	86,028	280,695	47,645	134,139
1936	1,092,379	481,606	102,757	307,884	51,428	148,704
1937	1,169,205	519,352	116,841	325,514	54,972	152,526
1938	1,136,705	523,003	117,449	291,833	56,360	148,060
1939	1,230,486	555,509	134,973	323,488	60,503	156,013
1940	1,326,620	589,490	160,851	340,163	68,776	167,340
1941	1,485,779	667,505	172,824	383,422	69,469	192,559
1942	1,449,908	589,110	185,661	405,697	69,767	199,673
1943	1,521,426	568,238	208,110	467,008	68,598	209,472
1944	1,671,263	632,482	209,320	512,020	71,812	245,629
1945	1,772,685	696,333	226,084	523,423	75,573	251,272
1946	1,792,786	735,417	242,894	480,029	89,088	245,358

(1) Motor gasoline
(2) Distillate and residual fuel oils not reported separately until 1932.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbooks.

SECTION VIII. REFINING

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Section VIII
Table 1

ESTIMATED WORLDWIDE CRUDE OIL REFINING CAPACITY BY AREA
AS OF JANUARY 1
(Barrels per day)

Year	United States(1)	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia	Europe	Total Free World	Sino Soviet Bloc	Total World
1947	5,569,482	1,387,452	6,956,934	733,500	48,750	174,405	630,445	8,544,034	575,000(2)	9,119,034
1948	6,034,252	1,479,350	7,513,602	859,100	47,750	202,850	682,990	9,306,292	650,000(2)	9,956,292
1949	6,438,995	1,722,370	8,161,365	915,100	49,000	283,800	1,049,980	10,459,245	650,000(2)	11,109,245
1950	6,696,300	1,450,500	8,146,800	916,500	39,000	266,000	859,200	10,227,500	1,134,000	11,361,500
1951	6,963,644	1,770,400	8,734,044	940,900	41,000	282,900	1,014,900	11,013,744	1,010,000(2)	12,023,744
1952	7,332,885	1,700,100	9,032,985	950,000	49,000	344,000	1,495,000	11,870,985	1,108,100(2)	12,979,085
1953	7,619,720	2,180,200	9,799,920	1,093,900	52,100	379,200	1,835,400	13,160,520	1,087,000	14,247,520
1954	7,983,977	2,392,700	10,376,677	1,159,100	72,400	459,800	2,077,500	14,145,477	1,246,100	15,391,577
1955	8,386,044	2,566,500	10,952,544	1,184,300	68,400	613,700	2,365,900	15,184,844	1,784,000	16,968,844
1956	8,582,636	2,776,800	11,359,436	1,272,800	72,400	731,000	2,373,700	15,809,336	1,481,000	17,290,336
1957	9,071,697	3,087,400	12,159,097	1,235,200	93,400	876,000	2,762,700	17,126,397	1,550,000	18,676,397
1958	9,358,307	3,438,600	12,796,907	1,253,700	98,400	1,088,500	2,902,900	18,140,407	(3)	(3)
1959	8,761,446	3,680,500	13,441,946	1,432,800	100,100	1,229,600	3,633,200	19,837,646	(3)	(3)
1960	9,842,624	3,762,300	13,604,924	1,434,800	116,500	1,374,600	3,977,500	20,508,324	3,322,000	23,830,324
1961	9,998,573	4,188,000	14,186,573	1,481,800	122,500	1,431,700	4,476,100	21,698,673	(3)	(3)
1962	10,033,047	4,442,900	14,475,947	1,514,100	140,300	1,913,000	4,918,100	22,961,447	(3)	(3)
1963	10,010,921	4,687,200	14,698,121	1,754,900	196,800	2,129,800	5,149,400	23,929,021	(3)	(3)
1964	10,305,774	5,828,400	15,134,174	1,801,300	365,200	2,537,000	6,263,500	26,101,174	(3)	(3)
1965	10,419,851	5,021,500	15,441,351	1,801,400	502,900	3,176,600	7,510,500	28,432,751	4,656,000	33,088,751
1966	10,393,839	5,344,500	15,738,339	1,910,200	613,300	3,516,700	8,541,900	30,320,439	3,976,000	34,296,439
1967	10,658,407	5,544,500	16,202,907	1,960,200	704,500	3,955,700	9,526,900	32,350,207	(3)	(3)
1968	11,353,404	5,883,100	17,236,504	2,052,700	720,100	4,323,900	11,085,000	35,418,204	5,925,000	41,343,204
1969	11,702,309	6,290,200	17,992,509	2,296,500	756,100	4,919,800	12,884,300	38,849,209	6,345,000	45,194,209
1970	12,021,273	6,512,500	18.533,773	2,437,900	784,900	5,565,900	13,941,400	41,263,873	7,092,000	48,355,873
1971	12,860,228	7,128,600	19,988,828	3,171,700	924,900	6,060,900	15,177,200	45,323,528	7,860,000	53,183,528
1972	13,292,468	7,578,600	20,871,068	2,851,300	902,400	6,817,700	16,982,800	48,425,268	8,420,000	56,845,268
1973	13,671,384	8,175,800	21,847,184	2,757,700	825,100	7,915,700	16,826,700	50,172,384	9,110,000	59,282,384
1974	14,361,536	9,053,800	23,415,336	2,882,200	1,092,200	8,932,700	18,110,100	54,432,536	9,686,000	64,118,536
1975	14,960,710	9,536,103	24,496,813	3,280,613	1,083,305	9,397,360	18,718,363	56,976,454	10,575,000	67,551,454

(1) Includes operating capacity plus operable shutdown but excludes inoperable shutdown capacity
(2) Estimates for U.S.S.R. only
(3) Data not available

Source: United States: U.S. Bureau of Mines, Petroleum Refineries in the United States and Puerto Rico: Annual
Rest of the World: Oil & Gas Journal, "World Wide Issues" and "International Petroleum Encyclopedia"

Section VIII
Table 1a

ESTIMATED WORLDWIDE CRUDE OIL REFINING CAPACITY BY AREA
AS OF JANUARY 1
(Barrels per day)

Year	United States(1)	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia	Europe	Total Free World	Sino Soviet Bloc	Total World
1976	15,236,621	9,713,093	24,949,714	3,284,951	1,328,200	9,868,344	19,972,306	59,403,515	12,406,000	71,809,515
1977	16,398,372	10,015,186	26,413,558	3,347,855	1,444,400	10,047,965	20,859,376	62,113,154	13,067,810	75,180,964
1978	17,047,724	10,592,020	27,352,020	3,506,484	1,467,157	10,176,819	20,728,204	63,352,984	13,938,000	77,290,984
1979	17,440,885	10,273,030	27,713,915	3,546,029	1,667,608	10,284,966	20,328,614	63,541,132	14,748,000	78,289,132
1980	17,988,121	10,683,671	28,671,792	3,518,080	1,666,108	10,386,375	20,243,747	64,486,102	15,346,000	79,832,102
1981	18,620,520	10,716,881	29,337,401	3,729,646	1,697,658	10,554,691	20,205,799	65,524,895	16,036,500	81,561,395
1982	17,889,734	10,720,055	28,609,789	3,312,152	1,761,870	10,966,825	19,444,519	64,095,155	16,533,000	80,628,155
1983	16,859,337	9,873,816	26,733,153	3,685,333	1,882,105	10,902,204	17,124,989	60,327,784	16,873,000	77,200,784
1984	16,137,141	9,590,962	25,520,962	3,901,082	1,879,990	10,473,079	16,231,932	58,114,186	17,200,000	75,314,186
1985	15,658,769	9,457,706	24,857,706	4,052,673	2,447,156	10,393,562	15,654,622	57,664,488	17,500,000	75,164,488
1986	15,458,948	8,613,690	24,072,638	4,274,255	2,520,403	10,111,652	14,071,507	55,050,455	17,500,000	72,550,455
1987	15,565,513	8,676,740	24,242,253	3,862,622	2,523,563	10,400,180	13,929,325	54,957,943	17,610,000	72,567,943
1988	15,915,418	8,856,748	24,772,166	4,146,222	2,630,250	10,274,302	14,127,595	55,950,479	17,610,000	73,560,479

(1) Includes operating capacity plus operable shutdown but excludes inoperable shutdown capacity

Source: 1976-1988: United States: U.S. Energy Information Administration, Petroleum Refineries in the United States and Puerto Rico, Petroleum Supply Annuals.
Rest of the World: Oil & Gas Journal, "Worldwide Report" Issue

Section VIII
Table 2

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
United States	9,043	9,444	9,815	10,312	10,629	10,870	11,200	11,696	12,431	12,133	12,442	13,416
Utilization Rate (%)	86.8	90.9	92.1	90.8	90.8	90.4	87.1	88.0	90.9	84.5	83.2	88.0
Other Western Hemisphere	4,880	5,070	5,240	5,485	5,780	6,185	6,690	6,980	7,645	7,655	7,215	7,380
Utilization Rate (%)	97.2	94.9	94.5	93.2	91.9	95.0	93.8	92.1	93.5	84.5	75.7	76.0
Western Europe	7,175	8,080	8,830	10,045	11,195	12,730	13,145	13,910	15,065	14,175	12,415	13,625
Utilization Rate (%)	95.5	94.6	92.7	90.6	86.9	91.3	86.6	81.9	89.5	78.3	66.3	68.2
Middle East	1,525	1,580	1,645	1,765	1,875	2,105	2,240	2,165	2,170	2,330	2,075	2,300
Utilization Rate (%)	84.7	82.7	83.9	86.0	81.6	86.3	70.6	75.9	78.7	80.8	63.2	70.0
Africa	465	540	570	520	535	710	740	815	905	910	975	1,020
Utilization Rate (%)	92.4	88.1	80.9	72.2	70.7	90.4	80.0	90.4	109.7	83.3	90.0	76.8
Asia	2,530	2,975	3,475	4,350	4,930	5,580	6,230	6,350	7,345	7,035	6,755	7,375
Utilization Rate (%)	79.6	84.6	87.8	100.6	100.2	100.3	102.8	93.1	92.8	78.8	71.9	74.7
Total Non-Communist World	25,618	27,689	29,575	32,477	34,944	38,180	40,245	41,916	45,561	44,238	41,877	45,116
Utilization Rate (%)	90.1	91.3	91.4	91.7	89.9	92.5	88.8	86.6	90.8	81.3	73.5	75.9
Communist Nations	4,890	5,270	5,655	6,115	6,705	7,335	7,845	8,555	9,365	10,185	11,025	11,575
Utilization Rate (%)	NA	NA	NA	NA	NA	103.4	99.8	101.6	102.8	105.2	104.3	93.3
Total World	30,508	32,959	35,230	38,592	41,649	45,515	48,090	50,471	54,926	54,423	52,902	56,691
Utilization Rate (%)	NA	NA	NA	NA	NA	94.1	90.4	88.8	92.7	84.9	78.3	78.9

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S. Bureau of Mines: Crude Petroleum, Petroleum Products, and Natural Gas Liquids, Annual and December Issues
Rest of the World, BP Statistical Review of the World Oil Industry, Annual Reports

Section VIII
Table 2a

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
United States	14,602	14,739	14,648	13,483	12,477	11,774	11,685	12,044	12,165	12,716
Utilization Rate (%)	89.0	86.5	84.0	75.0	67.0	65.8	69.3	76.9	77.6	82.3
Other Western Hemisphere	7,520	7,795	8,180	8,545	8,520	7,730	7,370	7,285	6,945	6,955
Utilization Rate (%)	75.1	73.6	79.6	80.0	79.5	72.1	74.7	76.0	74.4	73.8
Western Europe	12,775	12,855	13,665	12,330	10,970	10,075	9,710	9,790	9,490	10,060
Utilization Rate (%)	61.2	62.0	67.2	60.9	54.3	51.8	56.7	60.3	60.6	70.2
Middle East	2,240	2,535	2,365	2,445	2,205	2,245	2,515	2,665	2,795	2,950
Utilization Rate (%)	66.9	72.3	66.7	69.5	59.1	67.8	68.2	75.8	75.3	69.0
Africa	1,165	1,280	1,355	1,460	1,525	1,735	1,920	1,975	2,015	2,095
Utilization Rate (%)	80.7	87.3	81.2	87.6	89.8	98.5	102.0	77.8	79.2	83.1
Asia	7,600	7,905	8,165	7,730	7,560	7,160	7,120	7,310	7,370	7,465
Utilization Rate (%)	76.5	77.7	79.4	74.4	71.6	65.3	65.3	69.8	70.9	71.0
Total Non-Communist World	45,902	47,109	48,378	45,993	43,257	40,720	40,320	41,069	40,780	42,241
Utilization Rate (%)	73.9	74.4	76.1	71.3	66.0	63.5	66.8	70.7	72.2	75.3
Communist Nations	11,930	12,875	13,230	13,320	13,420	13,575	13,675	13,885	14,165	14,500
Utilization Rate (%)	91.3	92.4	89.7	86.8	83.7	82.1	81.0	80.7	80.9	81.9
Total World	57,832	59,984	61,608	59,313	56,677	54,295	53,995	54,954	54,945	56,741
Utilization Rate (%)	76.9	77.6	78.7	74.3	68.5	67.3	69.9	73.0	74.5	76.9

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S.--Energy Information Administration, Annual Petroleum Statements and Petroluem Supply Annuals.
Rest of World--BP Statistical Report of the World Oil Industry, Annual Report

Section VIII
Table 2b

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1987
United States	12,854
Utilization Rate (%)	83.1
Other Western Hemisphere	7,135
Utilization Rate	75.3
Western Europe	9,795
Utilization Rate	69.9
Middle East	2,970
Utilization Rate	72.1
Africa	2,170
Utilization Rate	82.5
Asia	7,375
Utilization Rate	71.8
Total Non-Communist World	42,299
Utilization Rate	75.3
Communist Nations	14,700
Utilization Rate	82.2
Total World	56,999
Utilization Rate	76.9

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S.--Department of Energy, Energy Information Administraiton, Petroleum Supply Annual
Rest of World--BP Statistical Review of World Energy, Annual

Section VIII
Table 3

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1980					1981				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,526	2,661	1,580	3,855	14,622	6,437	2,613	1,321	3,638	14,009
Canada	665	499	309	557	2,030	638	448	271	526	1,883
Mexico	329	245	309	371	1,254	360	270	365	297	1,292
Central and South America(1)	920	1,134	2,011	1,151	5,216	943	1,060	1,773	1,086	4,862
Western Europe	2,477	4,112	3,592	3,060	13,241	2,368	3,649	3,217	2,973	12,207
Middle East	325	545	890	1,076	2,836	304	544	837	996	2,681
Africa	286	394	433	378	1,491	297	397	434	371	1,499
Asia	1,473	1,864	3,691	3,092	10,120	1,410	2,017	2,917	3,355	9,699
Eastern Europe and U.S.S.R.	2,080	2,962	3,478	3,665	12,185	2,087	2,981	3,490	3,493	12,051
Total World	15,081	14,415	16,294	17,205	62,995	14,844	13,979	14,625	16,735	60,183

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Energy Information Administration, International Energy Annuals.

Section VIII
Table 3a

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1982					1983				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,358	2,606	1,070	3,357	13,391	6,360	2,456	852	3,470	13,138
Canada	619	396	208	416	1,639	597	388	175	406	1,566
Mexico	346	235	350	371	1,302	353	224	350	402	1,329
Central and South America (1)	940	988	1,720	1,063	4,711	963	1,034	1,511	1,153	4,661
Western Europe	2,456	3,530	2,896	2,307	11,187	2,529	3,434	2,630	2,398	10,991
Middle East	324	648	925	892	2,789	319	681	925	958	2,883
Africa	317	454	507	434	1,712	324	505	547	461	1,837
Asia	1,439	2,200	2,781	2,723	9,143	1,544	2,242	2,712	2,711	9,209
Eastern Europe and U.S.S.R.	2,158	3,023	3,437	3,602	12,220	2,271	3,090	3,476	3,441	12,278
Total World	14,957	14,080	13,894	15,165	58,096	15,260	14,054	13,178	15,399	57,892

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Energy Information Administration, International Energy Annuals.

Section VIII
Table 3b

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1984					1985				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,478	2,680	891	3,630	13,679	6,441	2,687	882	3,740	13,750
Canada	586	410	161	548	1,705	589	401	127	691	1,807
Mexico	363	266	375	479	1,483	360	292	398	523	1,572
Central and South America(1)	1,027	1,075	1,417	1,205	4,723	908	1,049	1,245	1,175	4,379
Western Europe	2,624	3,609	2,537	3,170	11,939	2,684	3,574	2,306	3,128	11,692
Middle East	401	805	970	1,122	3,296	427	952	1,034	1,065	3,479
Africa	322	495	536	527	1,879	351	515	537	494	1,896
Asia	1,612	2,325	2,623	2,979	9,540	1,659	2,417	2,343	2,966	9,385
Eastern Europe and U.S.S.R.	2,153	3,043	3,452	3,426	12,075	2,172	2,984	3,426	3,184	11,766
TOTAL WORLD	15,566	14,708	12,962	17,085	60,320	15,591	14,872	12,298	12,966	59,727

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Department of Energy, Energy Information Administration, International Energy Annuals.

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1986				
	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,752	2,796	889	4,085	14,522
Canada	551	394	115	475	1,535
Mexico	369	243	468	446	1,526
Central and South America(1)	1,892	1,062	1,178	1,217	4,349
Western Europe	2,772	3,902	2,450	2,905	12,029
Middle East	493	1,022	1,301	1,193	4,009
Africa	317	504	600	496	1,917
Asia	1,694	2,570	2,292	3,030	9,586
Eastern Europe and U.S.S.R.	2,247	2,840	4,219	3,089	12,395
TOTAL WORLD	16,087	15,334	13,512	16,935	61,868

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Department of Energy, Energy Information Administration, International Energy Annual 1987.

U.S. CRUDE OIL REFINING CAPACITY
(AS OF JANUARY 1)

	NUMBER OF REFINERIES			CRUDE OIL THROUGHPUT CAPACITY		
Year	Operating	Shutdown(3)	Total	Operating	Operable Shutdown	Inoperable Shutdown(2)
1976	265	22	287	14,867,529	369,092	190,900
1977	273	18	291	15,861,735	536,637	211,500
1978	290	12	302	16,793,724	254,000	182,223
1979	301	10	311	17,147,875	293,010	103,500
1980	311	8	319	17,612,652	376,469	N.A.
1981	315	9	324	18,051,260	569,260	N.A.
1982	254	47	301	16,103,579	1,786,155	N.A.
1983	233	25	258	14,960,647	1,898,690	N.A.
1984	214	33	247	14,837,685	1,299,456	N.A.
1985	199	24	223	14,360,583	1,298,186	N.A.
1986	192	24	216	14,638,507	820,441	N.A.
1987	195	24	219	14,940,463	625,050	N.A.
1988	195	18	213	15,017,968	897,450	N.A.

(1) Does not include Puerto Rico refineries.
(2) Facilities inoperable, needing extensive reconditioning.
(3) Figures beginning with 1980 are for operable shutdown only.

Source: U.S. Energy Information Administration, "Petroleum Refineries in the United States and U.S. Territories" Annual
Formerly Titled, "Petroleum Refineries in the United States and Puerto Rico" Annual
1982-1988: U.S. Energy Information Administration, Petroleum Supply Annuals

Section VIII
Table 5

PERCENTAGE YIELDS OF REFINED PETROLEUM PRODUCTS FROM CRUDE OIL(1) IN THE UNITED STATES-ANNUALLY 1964-1977

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Gasoline	44.1	44.0	44.4	44.0	43.9	44.8	45.3	46.2	46.2	45.6	45.9	46.5	45.5	43.4
Jet Fuel	5.6	5.7	6.2	7.5	8.3	8.2	7.5	7.4	7.2	6.8	6.8	7.0	6.8	6.6
Ethane (including Ethylene)	(2)	(2)	(2)	(2)	(2)	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Liquefied Gases	3.3	3.2	3.0	3.1	3.1	2.9	3.0	2.9	2.8	2.8	2.6	2.4	2.4	2.3
Kerosine	2.9	2.8	2.9	2.7	2.7	2.6	2.3	2.1	1.8	1.7	1.3	1.2	1.1	1.2
Distillate Fuel Oil	22.8	22.9	22.5	22.2	22.1	21.7	22.4	22.0	22.2	22.5	21.8	21.3	21.8	22.4
Residual Fuel Oil	8.2	8.1	7.6	7.7	7.2	6.8	6.4	6.6	6.8	7.7	8.7	9.9	10.3	12.0
Petrochemical Feedstocks	1.8	1.7	2.1	2.4	2.5	2.5	2.5	2.7	2.9	2.9	3.0	2.7	3.3	3.6
Special Naphthas	0.8	0.9	0.9	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.6	0.7	0.6
Lubricants	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.6	1.2	1.3	1.2
Wax	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1
Coke	2.6	2.5	2.5	2.5	2.5	2.6	2.7	2.6	2.8	2.9	2.8	2.8	2.6	2.5
Asphalt	3.5	3.7	3.8	3.5	3.6	3.5	3.6	3.8	3.6	3.6	3.7	3.2	2.8	2.9
Road Oil	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.0	0.1
Still Gas	4.0	4.1	3.9	3.9	4.0	4.1	4.1	3.8	3.9	3.9	3.9	3.9	3.7	3.6
Miscellaneous	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.7	1.0	1.0
Shortage(3)	-2.4	-2.4	-2.5	-2.9	-3.0	-3.1	-3.2	-3.4	-3.3	-3.6	-3.9	-3.7	-3.5	-3.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Other unfinished oils added to crude oil in computing yield
(2) Included with liquefied gases
(3) Processing Gain(-) or Loss(+)

Source: U.S. Energy Information Administration

PERCENTAGE YIELDS OF REFINED PETROLEUM PRODUCTS FROM CRUDE OIL(1) IN THE UNITED STATES-ANNUALLY 1978-1985

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Gasoline	44.1	43.0	44.5	44.8	46.4	47.6	46.7	45.8	45.9	46.6
Jet Fuel	6.6	6.9	7.4	7.6	8.1	8.5	9.1	9.6	9.8	10.0
Ethane (including Ethylene)	0.1	0.1	-	0.1	-	-	-	-	-	-
Liquefied Gases	2.3	2.3	2.4	2.4	2.2	2.7	2.9	3.1	3.2	3.4
Kerosine	1.0	1.3	1.0	0.9	0.9	0.9	0.9	0.8	0.7	0.6
Distillate Fuel Oil	21.4	21.5	19.7	20.5	21.5	20.5	21.5	21.6	21.2	20.5
Residual Fuel Oil	11.3	11.5	11.7	10.4	8.8	7.1	7.1	7.1	6.7	6.6
Petrochemical Feedstocks	4.1	4.7	5.1	4.7	3.6	3.3	2.8	2.8	3.1	2.9
Special Naphthas	0.7	0.6	0.7	0.6	0.4	0.5	0.4	0.4	0.4	0.4
Lubricants	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.2	1.3
Wax	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Coke	2.5	2.6	2.7	3.1	3.4	3.5	3.5	3.7	3.8	3.8
Asphalt	3.2	3.1	2.9	2.7	2.7	3.1	3.1	3.2	3.1	3.3
Road Oil	0.1	-	0.1	-	-	(4)	(4)	(4)	(4)	(4)
Still Gas	3.7	3.8	4.0	4.3	4.4	4.6	4.5	4.7	4.9	4.8
Miscellaneous	0.9	0.8	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.5
Shortage(2)	-3.4	-3.6	-4.4	-4.0	-4.4	-4.1	-4.4	-4.5	-4.7	-4.8
TOTAL(3)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Other unfinished oils added to crude oil in computing yield.
(2) Processing Gain (-) or Loss (+).
(3) Totals may not add due to independent rounding.
(4) Included in asphalt.

Source: 1978-1980--U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987--U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 6

U.S. CRUDE OIL REFINERY RUNS BY P.A.D. DISTRICT-DOMESTIC vs FOREIGN
(Thousands of barrels per day)

	DISTRICT II		DISTRICT II		DISTRICT III		DISTRICT IV		DISTRICT V		TOTAL	
Year	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
1947	648	265	1,312	-	1,889	2	133	-	826	-	4,808	267
1948	640	326	1,418	-	2,154	13	151	-	895	-	5,258	339
1949	486	374	1,404	-	1,973	46	165	-	876	3	4,904	423
1950	545	459	1,594	-	2,053	23	185	-	880	-	5,257	482
1951	641	477	1,796	1	2,398	10	215	-	947	10	5,997	498
1952	618	517	1,845	3	2,463	12	223	-	958	31	6,107	563
1953	601	552	1,949	7	2,601	8	235	-	975	71	6,361	638
1954	549	585	1,953	7	2,594	12	238	-	970	51	6,304	655
1955	530	633	2,119	18	2,832	30	255	-	968	95	6,704	776
1956	559	669	2,224	54	3,010	32	268	(1)	943	178	7,004	933
1957	640	656	2,219	60	2,898	24	273	(1)	900	249	6,930	989
1958	555	644	2,224	71	2,760	43	266	(1)	892	188	6,697	946
1959	574	641	2,340	59	2,922	27	290	(1)	902	238	7,028	965
1960	550	667	2,349	66	2,978	6	285	(1)	891	275	7,053	1,014
1961	573	650	2,347	86	3,020	6	284	(1)	910	308	7,134	1,050
1962	546	668	2,366	97	3,174	4	303	(1)	898	354	7,287	1,123
1963	566	680	2,445	96	3,322	3	298	9	926	342	7,557	1,130
1964	523	689	2,463	107	3,408	2	307	13	911	384	7,612	1,195
1965	489	711	2,533	112	3,506	(1)	317	13	957	405	7,802	1,241
1966	548	711	2,660	130	3,664	1	325	13	1,024	368	8,221	1,223
1967	680	587	2,693	156	3,901	2	326	18	1,095	357	8,695	1,120
1968	596	707	2,744	214(2)	4,116	2	339	27	1,243	324	9,038	1,274
1969	560	749	2,773	240(2)	4,263	(1)	351	35	1,267	391	9,214	1,415
1970	706	584	2,844	310(2)	4,357	-	345	47	1,297	380	9,549	1,321
1971	649	682	2,853	377(2)	4,438	54	360	45	1,239	503	9,539	1,661
1972	347	971	2,850	461(2)	4,741	75	360	37	1,193	661	9,491	2,205
1973	237	1,264	2,774	711(2)	4,656	398	372	44	1,167	808	9,206	3,225
1974	236	1,173	2,654	679(2)	4,317	786	376	44	1,098	770	8,681	3,452
1975	166	1,242	2,637	775(2)	4,078	1,182	380	45	1,086	851	8,347	4,095

(1) Less than 1,000 barrels daily
(2) Includes some Athabasca hydrocarbons

Source: Bureau of Mines, Annual Petroleum Statements

Section VIII
Table 6a

U.S. CRUDE OIL REFINERY RUNS BY P.A.D. DISTRICT-DOMESTIC vs FOREIGN
(Thousands of barrels per day)

	DISTRICT I		DISTRICT II		DISTRICT III		DISTRICT IV		DISTRICT V		TOTAL	
Year	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
1976	170	1,416	2,611	989(2)	3,957	1,760	391	50	1,038	1,034	8,167	5,249
1977	136	1,538	2,386	1,393	3,886	2,460	426	54	1,199	1,124	8,033	6,561
1979	166	1,480	2,238	1,491	3,584	2,806	415	62	1,865	539	8,269	6,379
1980	221	1,233	2,098	1,198	3,645	2,298	394	47	1,903	445	8,261	5,221
1981(3)	205	1,126	2,181	785	3,630	1,951	390	33	1,900	300	8,306	4,195
1982	211	982	2,161	621	3,876	1,522	374	41	1,888	191	8,510	3,357
1983	211	827	2,174	570	3,909	1,509	380	44	1,883	227	8,556	3,177
1984	174	936	2,221	536	3,955	1,622	401	32	2,061	214	8,812	3,341
1985	152	767	2,114	590	4,102	1,365	393	194	2,124	194	8,884	2,958
1986	144	1,030	2,073	753	3,848	2,143	370	63	2,273	229	8,707	4,217
1987	117	1,136	2,034	812	3,536	2,480	371	66	2,319	199	8,376	4,693

(2) Includes some Athabasca hydrocarbons.
(3) Beginning with 1981, figures are for refinery receipts of crude oil

Source: U.S. Energy Information Administration, P.A.D. Supply/Disposition Annual
1981-1982--U.S. Energy Information Administration, Petroleum Supply Annual
1983-1987--U.S. Energy Information Administration, Petroleum Supply Annual, Refinery Capacity

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1988

District and State	Number of Operable Refineries			Crude Capacity			
				Barrels Per Calendar Day		Barrels Per Stream Day	
	Total	Operating	Idle(1)	Operating	Idle	Operating	Idle
Delaware	1	1	0	140,000	0	150,000	0
Florida	1	0	1	0	17,000	0	20,000
Georgia	2	1	1	5,655	28,000	6,000	29,000
New Jersey	6	6	0	434,400	0	456,400	0
New York	1	1	0	41,850	0	45,000	0
North Carolina	2	1	1	3,000	10,000	3,500	12,000
Pennsylvania	8	8	0	727,000	0	759,500	0
Virginia	2	2	0	53,400	0	55,550	0
West Virginia	2	2	0	16,808	0	17,500	0
PAD District 1 Total	25	22	3	1,422,113	55,000	1,493,450	61,000
Illinois	7	7	0	854,700	75,000	898,600	80,000
Indiana	5	4	1	422,900	1,000	437,100	2,000
Kansas	8	6	2	322,400	30,400	339,483	32,000
Kentucky	3	2	1	218,900	600	226,300	1,000
Michigan	3	3	0	113,500	0	120,000	0
Minnesota	2	2	0	222,143	0	237,220	0
North Dakota	1	1	0	58,000	0	60,000	0
Ohio	4	4	0	488,100	0	507,000	0
Oklahoma	6	6	0	381,500	0	398,700	0
Tennessee	1	1	0	60,000	0	65,000	0
Wisconsin	1	1	0	32,000	0	34,000	0
PAD District II Total	41	37	4	3,174,143	107,000	3,320,403	115,000
Alabama	6	6	0	180,600	0	187,300	0
Arkansas	3	3	0	51,400	7,000	53,000	8,000
Louisiana	23	20	3	2,262,207	359,000	2,773,775	414,875
Mississippi	6	6	0	368,400	0	390,900	0
New Mexico	4	4	0	75,600	0	84,607	0
Texas	36	32	4	3,902,900	236,100	4,170,400	247,000
PAD District III Total	78	71	7	6,841,107	602,100	7,245,107	669,875
Colorado	2	2	0	76,500	0	80,000	0
Montana	5	4	1	130,450	13,400	135,000	14,000
Utah	6	6	0	154,500	0	160,000	0
Wyoming	6	5	1	164,555	350	170,700	400
PAD District IV Total	19	17	2	526,005	13,750	545,300	14,400
Alaska	6	6	0	222,700	0	238,260	0
California	33	31	2	2,259,600	119,600	2,395,509	132,800
Hawaii	2	2	0	115,900	0	118,000	0
Nevada	1	1	0	4,500	0	4,700	0
Oregon	1	1	0	0	0	0	0
Washington	7	7	0	451,900	0	470,754	0
PAD District V Total	50	48	2	3,054,600	119,600	3,227,223	132,800
United States Total	213	195	18	15,017,968	897,450	15,831,558	993,075

(1) Refineries where distillation units are completely idle but not permanently shutdown on January 1, 1988.

Source: U.S. Energy Information Administration, Petroleum Supply Annual

Section VIII
Table 7a

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1988

District and State	Charge Capacity (Barrels Per Stream Day)						
	Vacuum Distillation	Thermal Operation	Catalytic Cracking (Fresh)	Catalytic Cracking (Recycled)	Catalytic Reforming	Catalytic Hydrocracking	Catalytic Hydrotreating
Delaware	95,000	46,000	65,000	5,000	56,000	19,000	110,000
Florida	11,390	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	3,153
New Jersey	244,100	21,500	251,000	37,000	77,500	0	284,500
New York	27,000	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
Pennsylvania	319,300	0	259,300	12,300	207,690	51,000	475,020
Virginia	29,000	13,500	27,000	2,000	9,500	0	25,000
West Virginia	9,675	0	0	0	3,750	4,440	0
PAD District 1 Total	735,465	81,000	602,300	56,300	354,440	74,440	897,673
Illinois	337,600	120,700	339,000	7,400	280,300	66,500	548,100
Indiana	204,200	27,500	166,000	6,000	94,500	0	232,800
Kansas	119,650	53,000	124,500	10,000	99,300	3,190	188,300
Kentucky	92,000	57,600	100,000	0	53,500	0	170,300
Michigan	38,500	0	45,000	1,000	36,500	0	55,300
Minnesota	137,000	54,000	78,000	1,000	61,500	0	209,700
North Dakota	0	0	26,000	5,200	12,100	0	17,000
Ohio	185,000	31,200	177,000	25,300	161,600	87,000	190,000
Oklahoma	129,000	27,000	131,000	6,400	90,000	5,000	170,000
Tennessee	10,000	0	30,000	0	10,000	0	33,500
Wisconsin	20,500	0	9,700	1,000	8,000	0	14,800
PAD District II Total	1,273,450	371,000	1,226,400	63,300	907,300	161,690	1,829,800
Alabama	50,000	12,000	0	0	32,000	0	63,300
Arkansas	23,300	0	18,500	775	9,000	0	18,500
Louisiana	1,157,700	563,500	923,800	35,800	520,500	149,000	1,164,400
Mississippi	273,950	70,500	72,000	9,000	95,800	68,000	253,800
New Mexico	13,900	0	27,100	6,100	19,200	0	29,200
Texas	1,843,700	377,900	1,602,500	135,200	1,134,200	276,000	3,082,450
PAD District III Total	3,362,550	1,023,900	2,643,900	186,875	1,810,700	493,000	4,611,650
Colorado	23,000	0	23,500	1,000	17,500	0	27,500
Montana	53,250	9,900	52,100	6,600	37,800	4,900	121,400
Utah	45,380	8,500	54,800	10,600	28,550	2,000	39,250
Wyoming	75,000	9,000	62,000	12,200	32,250	0	48,800
PAD District IV Total	196,630	27,400	192,400	30,400	116,100	6,900	236,950
Alaska	6,000	0	0	0	12,000	9,000	0
California	1,329,150	496,000	637,150	22,050	558,950	391,100	1,387,430
Hawaii	58,000	13,000	22,000	3,000	12,000	15,900	15,500
Nevada	2,500	0	0	0	0	0	0
Oregon	16,000	0	0	0	0	0	0
Washington	218,500	68,000	100,000	19,500	119,800	52,000	190,800
PAD District V Total	1,630,150	577,000	759,150	44,550	702,750	466,000	1,593,730
United States Total	7,198,245	2,080,300	5,424,150	381,425	3,891,290	1,202,030	9,169,803

Source: U.S. Energy Information Administration, Petroleum Supply Annual.

Section VIII
Table 8

OPERATING REFINERIES WORLDWIDE
(Barrels per Calendar Day)
(as of January 1, 1987)

Area/ Country	Number of Plants	Crude Capacity	Vaccuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro-cracking	Catalytic Hydro-refining	Catalytic Hydro-treating
Canada	27	1,759,700	602,600	76,100	370,300	345,100	150,800	23,200	704,950
Caribbean	8	1,392,300	580,300	125,000	79,000	183,340	15,000	244,500	496,950
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	121,000	59,300	--	12,000	5,800	15,000	10,000	15,700
Trinidad	2	300,000	171,000	18,000	25,000	31,000	--	104,500	41,800
Virgin Islands	1	600,000	190,000	40,000	--	125,000	--	130,000	290,000
Latin America	70	5,524,740	2,333,710	454,400	1,043,320	264,218	41,900	275,600	819,993
Brazil	13	1,321,100	685,200	41,100	321,900	21,600	--	--	132,700
Mexico	9	1,349,000	600,700	82,000	267,000	137,800	18,000	--	486,000
Venezuela	7	1,224,700	551,500	122,000	179,400	6,000	--	275,600	--
Europe	125	14,192,863	3,739,519	1,632,290	1,538,600	2,042,058	259,500	1,906,593	4,283,017
France	15	1,834,050	427,650	167,400	252,300	239,300	13,500	277,900	504,400
Germany (West)	19	1,719,800	537,300	269,400	186,200	317,000	96,200	326,700	690,950
Italy	21	2,678,700	708,700	345,130	276,000	296,600	55,000	298,600	591,400
Netherlands	7	1,400,800	253,370	148,710	125,500	150,400	30,000	183,200	511,820
Spain	10	1,305,000	291,800	124,000	92,500	187,100	15,000	156,100	284,000
United Kingdom	15	1,779,700	625,090	166,000	345,500	367,500	19,000	131,600	770,590
Middle East	42	4,357,097	1,085,214	236,999	146,260	447,925	386,810	607,329	689,460
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	618,000	217,000	--	30,000	51,000	159,000	337,000	36,000
Saudi Arabia	6	1,125,000	67,655	26,000	10,000	86,900	68,100	39,000	207,000
Asia-Pacific	106	10,400,180	2,618,577	471,043	868,908	1,093,230	226,630	1,812,430	3,153,680
India	12	991,070	331,007	104,730	129,408	26,690	6,500	13,800	71,820
Japan	46	4,790,050	1,532,940	80,520	502,750	561,420	50,950	1,497,500	1,943,910
Korea	6	862,000	35,500	30,000	--	63,200	7,000	21,000	95,000
Singapore	5	961,000	170,500	133,000	--	50,600	44,200	76,700	288,400
Africa	44	2,489,563	390,617	83,170	131,100	280,477	34,000	105,100	470,904
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	7	452,110	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	14,582	--	--	37,226
South Africa	5	388,500	177,000	59,500	81,400	57,800	18,000	66,300	125,150
TOTAL	422	40,116,443	11,350,537	3,079,002	4,177,488	4,656,348	1,114,640	5,974,752	10,618,954

Source: Oil and Gas Journal, "Worldwide Report" issue, December 30, 1986.

Section VIII
Table 8a

OPERATING REFINERIES WORLDWIDE
(Barrels per Calendar Day)
(as of January 1, 1988)

Area/ Country	Number of Plants	Crude Capacity	Vaccuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro-cracking	Catalytic Hydro-refining	Catalytic Hydro-treating
Canada	27	1,868,900	654,650	78,150	385,550	368,650	189,550	23,200	755,580
Caribbean	9	1,339,300	605,300	165,000	79,000	187,750	15,000	244,500	496,950
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	123,000	59,300	--	12,000	5,800	15,000	10,000	15,700
Trinidad	2	300,000	171,000	18,000	25,000	31,000	--	104,500	41,800
Virgin Islands	1	545,000	215,000	80,000	--	125,000	--	130,000	290,000
Latin America	67	5,648,548	2,428,735	484,700	1,093,335	289,118	41,900	296,100	544,753
Brazil	13	1,407,300	698,200	33,800	350,500	24,800	--	--	133,400
Mexico	9	1,354,000	600,700	82,000	267,000	157,800	18,000	--	207,000
Venezuela	6	1,201,100	560,600	138,000	193,100	6,000	--	296,100	--
Europe	120	14,279,635	4,718,469	1,781,130	1,729,350	2,082,262	261,500	1,964,670	4,315,658
France	14	1,940,600	678,600	163,550	288,800	258,700	13,500	262,300	552,400
Germany(W)	16	1,647,800	619,800	286,400	174,700	307,100	96,200	326,700	652,150
Italy	19	1,563,100	723,700	388,400	277,400	289,600	55,000	301,900	596,700
Netherlands	7	1,381,000	401,370	151,560	125,500	157,400	30,000	148,200	522,400
Spain	10	1,305,000	374,800	178,000	143,500	189,000	15,000	190,500	283,000
United Kingdom	15	1,802,700	806,090	152,000	392,000	367,500	21,000	115,600	776,590
Middle East	42	4,821,817	1,167,746	225,300	207,760	553,166	386,510	608,429	661,442
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	628,000	217,000	--	30,000	51,000	159,000	338,100	36,000
Saudi Arabia	7	1,375,000	271,655	27,000	76,000	178,000	65,100	39,000	314,000
Asia-Pacific	104	10,310,652	3,017,840	395,700	845,370	1,080,240	246,250	1,752,330	3,231,240
India	12	1,058,742	327,570	113,900	133,470	26,690	--	13,800	77,890
Japan	43	4,566,850	1,675,940	82,520	557,150	533,940	50,950	1,393,200	2,083,660
Korea	5	820,000	33,400	30,000	--	59,450	7,000	21,000	92,800
Singapore	5	858,000	256,100	137,700	--	54,300	48,100	83,600	235,400
Africa	41	2,806,200	344,037	87,170	142,040	296,582	31,500	101,600	555,412
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	7	452,110	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	14,582	--	--	37,226
South Africa	4	433,500	104,000	63,500	84,400	62,800	18,000	77,300	142,150
TOTAL	410	40,862,752	13,091,337	3,334,349	4,582,425	4,857,768	1,172,210	5,241,729	10,761,035

Source: Oil and Gas Journal, "Worldwide Report" issue, December 28, 1987.

Section VIII
Table 9

NELSON REFINERY OPERATING COST INDEXES
(1956 = 100)

Year	Fuel and Power Cost	Wage Rate	Productivity of labor	Labor Cost	Investment Related	Chemicals and Catalyst	Nelson Operating Indexes	
							Refineries	Processes
1956	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1957	115.1	104.1	98.1	106.1	105.4	102.2	106.7	107.7
1958	102.1	105.4	100.3	105.0	109.5	104.4	105.8	105.8
1959	103.5	111.5	109.0	102.3	113.7	107.8	106.8	106.0
1960	109.9	113.0	112.9	100.3	116.9	114.3	108.8	107.2
1961	106.7	119.2	122.3	97.5	119.2	103.2	106.7	106.4
1962	100.9	123.9	131.8	93.9	121.7	96.7	103.7	103.6
1963	104.4	129.1	142.7	90.5	115.2	95.6	100.8	100.6
1964	102.8	132.8	149.1	89.1	114.5	99.0	100.2	100.5
1965	106.1	138.8	157.2	88.3	116.0	119.3	104.6	106.2
1966	105.6	145.4	165.9	87.7	103.2	130.9	102.8	100.3
1967	104.7	152.4	165.1	92.3	103.6	128.6	104.1	101.2
1968	103.8	158.0	173.1	91.8	103.6	124.3	103.5	101.3
1969	107.1	171.3	187.6	91.3	104.3	125.9	104.3	102.5
1970	129.2	183.1	179.9	101.8	115.7	127.4	113.9	117.6
1971	166.4	194.9	185.6	105.0	115.7	120.1	117.4	133.3
1972	166.8	210.0	197.0	107.1	162.3	112.2	118.5	147.0
1973	186.8	221.2	214.9	102.9	193.0	117.3	125.7	168.0
1974	310.5	243.9	201.5	121.1	215.8	153.2	159.7	222.5
1975	376.8	273.9	206.0	133.0	246.5	186.7	189.3	258.5
1976	384.5	314.3	216.2	145.5	252.6	195.2	209.3	267.1
1977	430.5	346.2	231.4	149.6	263.6	184.4	228.2	287.8
1978	422.4	388.6	229.4	169.6	280.7	191.8	243.2	297.0
1979	605.7	424.8	222.5	191.1	300.2	216.6	278.3	374.4
1980	810.5	439.9	226.3	200.6	325.2	229.2	312.7	457.5
1981	1,016.0	512.8	188.8	271.9	357.2	237.7	373.3	562.2
1982	931.9	574.7	178.6	321.8	384.1	234.1	396.6	557.2
1983	913.8	621.9	186.7	334.5	415.3	231.3	412.9	565.5
1984	968.3	629.9	204.5	308.0	436.6	233.4	417.4	584.2
1985	878.9	642.3	219.7	293.4	445.8	222.9	406.8	551.7
1986	548.8	651.8	253.8	259.4	460.0	206.7	369.0	430.8
1987	554.1	663.2	261.8	253.5	473.2	192.8	371.8	435.6

Source: Oil and Gas Journal.

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
PAD District I					
American Refining Group, Inc.	Indianaola, Pa.	180	03/84	12/85	3
Amoco Oil Co.	Baltimore, Md.	15,000	01/82	03/82	25+
Ashland Oil Inc.	Buffalo, N.Y.	64,000	07/82	12/84	36+
Ashland Oil Inc.	Freedom, Pa.	6,800	04/85	12/85	37+
ATC Petroleum Inc.	Newington, N.H.	13,400	07/81	12/81	7
ATC Petroleum Inc.	Wilmington, N.C.	11,900	07/81	12/81	8
Chevron U.S.A. Inc.	Baltimore, Md.	14,200	N.A.	N.A.	38
Elk Refining Co. (division of Pennzoil Co. Inc.)	Falling Rock, W.Va.	5,600	12/82	12/82	25+
Manatee Energy Co.	Port Manatee, Fl.	28,400	05/81	10/81	2
Mobil Oil Corp.	Buffalo, N.Y.	43,000	05/81	07/81	25+
Quaker State Oil Refining Corp.	Emlenton, Pa.	0	12/83	12/83	25+
Virginia Oil & Refining Co., Inc.	Jonesville, Va.	1,000	N.A.	N.A.	2
TOTAL PAD I		203,480			
PAD District II					
Allied Materials Corp.	Stroud, Ok.	7,600	12/84	02/85	37+
Amoco Oil Co.	Sugar Creek, Mo.	104,000	05/82	06/82	25+
Amoco Oil Co.	Wood River, Il.	104,000	05/81	10/81	25+
Ashland Oil Inc.	Findlay, Oh.	20,400	02/82	12/84	36+
Ashland Oil Inc.	Louisville, Ky.	25,200	04/82	12/84	36+
B-T Energy Corp.	Louisville, Ky.	3,000	11/84	11/85	3
Champlin Petroleum Co.	Enid, Ok.	53,800	06/83	12/83	25+
Chevron U.S.A. Inc.	Cincinnati, Oh.	43,700	N.A.	N.A.	38+
Conoco Inc.	Wrenshall, Mn.	23,500	05/81	09/81	5
CRA, Inc.	Scottsbluff, Nb.	5,600	05/82	06/82	25+
Dillman Oil Recovery Inc.	Oblong, Il.	1,200	01/81	02/82	4+
Dow Chemical U.S.A.	Bay City, Mi.	20,000	05/80	09/81	25+
E-Z Serv Refining Inc.	Shallow Water, Kn.	9,500	04/81	02/82	25+
Energy Cooperative Inc.	East Chicago, In.	126,000	05/81	06/82	25+
Energy Development	Crossville, Il.	1,000	02/81	04/81	22
Flying J Petroleum Inc.	Williston, N.D.	4,600	N.A.	N.A.	32
Gladieux Refinery Inc.	Fort Wayne, In.	19,000	N.A.	N.A.	27+
Gulf Oil Corp.	Toledo, Oh.	50,300	06/81	11/81	25+
Hudson Refining Co. Inc.	Cushing, Ok.	19,000	12/82	11/83	6
Indiana Refining Inc.	Princeton, In.	5,000	12/80	02/81	23
Industrial Fuel and Asphalt of Indiana Inc.	Hammond, In.	7,600	12/81	06/82	25+
Lakeside Refining Co.	Kalamazoo, Mi.	5,600	N.A.	N.A.	39
Mid-America Refining Co. Inc.	Chanute, Kn.	3,000	03/81	07/82	25+
Mobil Oil Corp.	Augusta, Kn.	50,000	09/83	09/83	25+
Northland Oil and Refining Co.	Dickinson, N.D.	5,000	02/81	02/82	7
Oklahoma Refining Co.	Cyril, Ok.	12,750	12/84	12/84	36+
Okmulgee Refining Co.	Okmulgee, Ok.	25,000	06/82	12/82	25+
Phillips Petroleum Co.	Kansas City, Kn.	80,000	08/82	09/82	25+
Texaco Inc.	Lockport, Il.	72,000	04/81	10/81	25+
Texaco Refining and Marketing Inc.	Lawrenceville, Il.	79,000	04/85	12/85	37+
Texas American Petrochemical Inc.	West Branch, Mi.	11,500	09/81	02/82	25+
Tonkawa Refining Co.	Arnett, Ok.	12,000	06/84	09/84	16
Tosco Corp.	Duncan, Ok.	47,000	06/83	12/84	35
Wireback Oil Co.	Plymouth, Ok.	1,800	02/81	03/81	25+
TOTAL PAD II		1,058,650			

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 10a

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
District III					
Adobe Refining Co., div. of Funding Systems Refining Corp.	La Blanca, Tx.	5,200	11/81	12/81	25+
Bayou State Oil Corp.	Hosston, La.	3,000	01/81	03/82	25+
Brio Refining Inc.	Friendswood, Tx.	12,500	09/82	12/82	4
Bronco Refining Co.	Houston, Tx.	2,250	04/81	07/82	1
Carbonit Refining Co.	Hearne, Tx.	11,000	02/81	12/81	6
Caribou-Four Corners Inc.	Farmington, N.M.	2,200	05/82	08/84	19
Celeron Oil and Gas Co.	Mermentau, La.	11,000	02/83	08/84	6
Clark Oil & Refining Corp.	Mt. Airy, La.	0	N.A.	N.A.	39
Clinton Manges	Palestine, Tx.	6,000	07/81	07/82	25+
Conoco Inc.	Alvin/Texas City, Tx.	33,274	10/85	12/85	22
Copano Refining Co.	Ingleside, Tx.	11,100	09/81	02/82	4
Damson Gas Processing Corp.	White Deer, Tx.	0	02/85	05/85	12
Dorchester Refining Co.	Mt. Pleasant, Tx.	26,500	09/84	12/84	36+
Dow Chemical U.S.A.	Freeport, Tx.	190,000	08/81	06/82	1
Eagle Refining Corp.	Jacksboro, Tx.	1,800	03/81	07/82	1
Eddy Refining Co.	Houston, Tx.	3,250	10/84	11/84	36+
Erickson Refining Corp.	Pt. Neches, Tx.	30,000	12/81	08/83	4
Evangeline Refining Co.	Jennings, La.	4,500	12/82	12/82	25+
Flint Chemical Co.	San Antonio, Tx.	1,500	01/85	03/85	23
Giant Industries Inc.	Farmington, N.M.	13,500	05/82	11/82	7
Gulf Oil Corp.	Venice, La.	28,700	04/81	12/81	13
Independent Refining Corp.	Winnie, Tx.	50,000	10/81	08/83	23
International Processors	St. Rose, La.	28,356	09/82	02/85	6
Lake Charles Refining Co.	St. Charles, La.	28,000	04/81	02/82	2
Longview Refining Co.	Longview, Tx.	14,000	12/81	04/82	25+
MacMillan Petroleum Co.	Norphlet, Ar.	5,800	N.A.	N.A.	39
Mallard Resources Inc.	Gueydan, La.	7,400	11/83	12/83	4
McTan Refining Corp.	St. James, La.	19,300	07/81	08/83	6
Mid-Gulf Energy Corp.	Ingleside, Tx.	39,400	10/83	05/84	6
Natchez Refining Co.	Natchez, Ms.	16,000	06/82	09/82	2
Petraco-Valley Oil Refining Co.	Brownsville, Tx.	12,300	03/83	12/83	5
Petromax Refining Co.	Houston, Tx.	2,000	N.A.	N.A.	4
Placid Oil Co.	Mont Belvieu, Tx.	8,500	01/82	07/82	2
Port Petroleum Inc.	Stonewall, La.	3,200	12/83	02/84	4
Quintana Petrochemical Co.	Corpus Christi, Tx.	33,300	07/84	09/84	30
Quitman Refining Co.	Quitman, Tx.	6,600	04/82	06/82	4
Rio Grande Crude Refining	Brownsville, Tx.	9,500	06/81	06/82	3
Rio Grande Recovery Systems Inc.	Brownsville, Tx.	1,000	05/81	02/82	2
Schulze Processing Inc.	Tallulah, La.	1,760	05/81	08/82	4
Shepard Oil Co.	Jennings, La.	10,000	05/81	02/82	4
Shore, Inc.	Kilgore, Tx.	550	03/83	07/83	3
Sooner Refining Co.	Darrow, La.	8,000	01/82	02/62	2
Southern Union Refining Co.	Monument, N.M.	5,400	01/81	10/81	25+
Southern Union Refining Co.	Lovington, N.M.	36,100	08/84	11/84	8
Southland Oil Co.	Yazoo City, Ms.	5,500	02/81	07/81	25+

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 10b

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
Tesoro Petroleum Corp.	Carrizo Springs, Tx.	26,100	07/84	12/84	27
T & S Refining Co.	Jennings, La.	10,500	07/81	03/82	2
Texaco Refining and Marketing Inc.	Amarillo, Tx.	20,000	04/85	12/85	37+
Texas Refining Co.	Midland, Tx.	2,500	04/81	06/81	1
Texas Standard Refining Inc.	Houston, Tx.	1,800	01/81	10/81	*
Thriftway Oil Co.	Graham, Tx.	1,184	04/81	11/83	25+
Tipperary Refining Co.	Ingleside, Tx.	7,320	01/82	03/82	4
Tropicana Energy Co.	Ft. Worth (Euless), Tx.	4,650	12/83	12/85	19
Wickett Refining Co.	Wickett, Tx.	8,000	01/76	02/82	25+
TOTAL PAD III		831,294			
PAD District IV					
Caribou-Four Corners Inc.	Woods Cross, Ut.	8,400	12/82	12/84	21
C & H Refinery Inc.	Lusk, Wy.	180	01/81	02/82	25+
Gary-Refining Corp.	Fruita, Co.	15,200	02/85	10/85	19
Glacier Park Co.	Osage, Wy.	10,000	02/81	03/82	4
Glenrock Refinery Inc.	Glenrock, Wy.	6,000	04/81	09/81	5
Husky Oil Co.	Cody, Wy.	11,500	06/82	09/82	25+
Kenco Refining Inc.	Wolf Point, Mt.	4,700	10/85	12/85	8
Morrison Petroleum Co.	Woods Cross, Ut.	6,000	12/85	12/85	11
Sage Creek Refining Co.	Cowley, Wy.	1,000	01/82	06/82	17
Silver Eagle Oil Co.	LaBarge, Wy.	3,000	N.A.	N.A.	13
Southwestern Refining Co.	La Barge, Wy.	1,040	04/81	08/81	7
Texaco Inc.	Casper, Wy.	21,000	03/82	07/82	25+
TOTAL PAD IV		88,020			
PAD District V					
Anchor Refining Co. Inc.	McKittrick, Ca.	9,000	11/82	02/84	6
Arizona Fuels Corp.	Fredonia, Az.	6,000	02/83	09/83	11
Beacon Oil Co.	Hanford, Ca.	17,300	N.A.	N.A.	27
Chevron U.S.A. Inc.	Bakersfield, Ca.	26,000	N.A.	N.A.	38+
Coastal Petroleum Refiners Inc.	Bakersfield, Ca.	10,000	06/85	12/85	6
ECO Petroleum Inc.	Long Beach, Ca.	0	07/81	03/84	8
Demenno-Kerdoon	Compton, Ca.	10,000	01/83	08/83	6
Golden Eagle Refining Co., Inc.	Carson, Ca.	16,170	11/84	02/85	37+
Marlex Oil & Refining Co.	Los Angeles, Ca.	21,100	01/84	03/84	7
Quad Refining Corp.	Bakersfield, Ca.	7,000	08/80	10/81	2
Road Oil Sales Inc.	Bakersfield, Ca.	6,000	01/81	12/81	9
Sabre Refining Inc.	Bakersfield, Ca.	10,000	N.A.	N.A.	16
Tosco Corp.	Bakersfield, Ca.	38,800	11/83	11/84	33
United Independent Oil Co.	Tacoma, Wa.	730	07/80	03/82	7
U.S.A. Petrochemical Corp.	Ventura, Ca.	24,000	12/84	12/84	7
Western Oil & Refining	Long Beach, Ca.	19,200	N.A.	N.A.	11
TOTAL PAD V		221,300			
TOTAL UNITED STATES		2,402,744			

* Less than one year.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 11

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY
(Thousands of Barrels per Day)

1960		1970		1980	
Company	Capacity	Company	Capacity	Company	Capacity
Standard of New Jersey	961.7	Standard of New Jersey	1,087.0	Exxon	1,557.0
Texaco	724.0	Standard of Indiana	1,040.4	Standard of California	1,383.7
Socony-Mobil	716.7	Texaco	1,029.5	Standard of Indiana	1,238.0
Standard of Indiana	675.4	Shell	1,011.5	Shell	1,123.4
Standard of California	647.5	Standard of California	969.0	Texaco	1,059.0
Shell	594.0	Mobil	794.9	Gulf(1)	949.2
Gulf	500.6	Gulf(1)	751.6	Mobil	835.7
Sinclair	473.0	Atlantic Richfield	681.2	Atlantic Richfield	811.2
Cities Service	293.0	Sun	455.0	Sun(2)	521.5
Phillips	274.3	Union	444.0	Marathon	513.0
Sun	255.0	Standard of Ohio	439.0	Union	490.0
Tidewater	253.5	Phillips	398.0	Ashland	462.9
Continental	216.0	Ashland	318.3	Standard of Ohio	452.0
Atlantic	210.0	Continental	299.0	Conoco	448.1
Pure	187.0	Cities Service	281.0	Phillips	397.0
Union	181.0	Getty	207.0	Cities Service	291.0
Sunray Mid-Continent	171.0	Marathon	205.0	Union Pacific	283.8
Standard of Ohio	170.5	Coastal States Gas	135.0	Coastal	278.0
Ashland	168.5	Amerada Hess	125.0	Getty	261.5
Richfield	165.0	Union Pacific	122.5	Tosco	260.5
U.S. TOTAL	9,629.7	U.S. TOTAL(3)	12,811.0	U.S. TOTAL(3)	18,279.3

(1) Includes volumes from Gulf's Bayamon refinery in Puerto Rico.
(2) Includes volumes from Sun's Yabucoa refinery in Puerto Rico.
(3) Includes Puerto Rico.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

Section VIII
Table 11a

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY
(Thousands of Barrels per Day)

1983		1984		1985	
Company	Capacity	Company	Capacity	Company	Capacity
Standard of California	1,296.5	Chevron(5)	2,029.3	Chevron(1)(5)	1,879.2
Exxon	1,200.0	Exxon	1,182.0	Exxon	1,200.0
Standard of Indiana	1,011.0	Shell	1,005.0	Shell	1,019.6
Shell	1,005.2	Standard of Indiana	986.0	Amoco (Std. of Ind.)	982.0
Gulf(1)	849.2	Texaco(6)	939.0	Texaco	873.2
Texaco	815.0	Mobil	750.0	Mobil	755.0
Mobil	750.0	Atlantic Richfield	741.0	Standard Oil (Ohio)	664.5
Atlantic Richfield	701.0	U.S. Steel	492.5	Atlantic Richfield	655.0
U.S. Steel	492.5	Standard of Ohio	456.0	U.S. Steel	492.5
Standard of Ohio	456.0	Sun(2)	443.0	Unocal	474.5
Sun(2)	443.0	DuPont	429.8	Sun(2)	443.0
DuPont	415.8	Ashland	353.3	DuPont	400.0
Unocal(3)	370.5	Unocal	339.0	Ashland	346.5
Ashland	353.3	Phillips	300.0	Phillips	300.0
Southland(Citgo)(4)	297.0	Southland	297.0	Southland	297.0
Phillips	295.0	Koch	262.0	Koch Industries	280.0
Getty	258.6	Union Pacific	217.0	Coastal	261.3
Koch	242.0	Coastal	171.3	Union Pacific	220.0
Union Pacific	215.0	Kerr-McGee	164.8	Kerr-McGee	164.8
Coastal	171.3	Tosco	164.5	Total	152.0
U.S. TOTAL(7)	14,949.1	U.S. TOTAL(7)	14,481.6	U.S. TOTAL(7)	14,761.5

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(1) Includes volumes from Gulf's Bayamon refinery in Puerto Rico.
(2) Includes volumes from Sun's Yabucoa refinery in Puerto Rico.
(3) Unocal Corporation is the parent of Union Oil Company of California.
(4) Southland acquired the refining, marketing and transportation sections of Citgo Petroleum Corp., a subsidiary of Occidental, on September 1, 1983.
(5) Standard Oil of California acquired the Gulf Corporation on June 15, 1984 and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure reflects this acquisition which also includes volumes from a refinery in Bayamon, Puerto Rico.
(6) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figure reflects this acquisition.
(7) Includes Puerto Rico.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1985, Discussion Paper #014R.

Section VIII
Table 11b

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY(1)
(Thousands of Barrels per Day)

1986	
Company	Capacity
Chevron(2)	1,845.0
Exxon	1,143.5
Shell	1,045.8
Amoco	967.0
Texaco	886.0
Mobil	755.0
ARCO (Atlantic Richfield)	673.0
Standard Oil	667.6
USX (U.S. Steel)	513.0
Unocal	490.0
Sun(3)	443.0
DuPont	393.2
Ashland	346.5
Coastal	318.3
Phillips	305.0
Citgo (Southland)	297.0
Koch Industries	280.0
Union Pacific	218.4
Kerr-McGee	155.8
Solomon (Philbro)	154.4
U.S. TOTAL	15,067.8

(1) Operating capacities of refineries in the U.S. and Puerto Rico as of January 1, 1987. Excludes Guam and Virgin Island operations.
(2) Includes 38 mbd from a refinery in San Juan, Puerto Rico.
(3) Includes 85 mbd from a refinery in Yabucoa, Puerto Rico.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1986, Discussion Paper #014R.

Section VIII
Table 12

U.S. GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION
(As of January 1)

	1984			1985			1986		
State	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gas/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)
AL	5	182.0	599.6	5	182.0	403.2	5	167.0	401.2
AK	2	62.0	56.8	2	62.0	50.3	2	82.0	39.0
AR	3	130.0	82.9	5	1,005.0	104.6	6	962.5	104.6
CA	37	1,483.1	1,280.1	34	1,167.6	1,267.3	36	1,066.0	1,038.3
CO	44	858.0	1,008.7	43	876.2	1,085.2	47	1,004.9	1,038.3
FL	3	961.5	374.0	3	934.0	353.9	3	799.0	454.8
IL	2	551.5	985.8	2	551.5	985.2	0	0	0
KS	25	4,901.5	1,942.4	27	5,124.0	2,480.2	28	5,646.0	2,280.8
KY	2	897.6	431.2	2	916.0	440.9	3	916.0	481.0
LA	106	22,194.5	9,852.3	97	22,983.5	11,253.5	94	20,366.4	10,085.2
MI	6	449.4	926.4	9	675.4	1,095.0	26	4,734.9	963.8
MS	7	1,005.0	51.6	6	995.0	55.1	6	995.0	55.5
MT	8	58.0	95.8	9	70.0	113.1	9	70.0	120.0
NE	2	13.5	11.9	2	13.5	11.6	2	13.5	10.5
NM	44	3,683.3	3,845.4	39	3,255.2	3,954.7	34	3,141.6	3,461.7
ND	9	306.8	520.3	11	314.2	663.0	10	284.3	537.6
OK	104	4,857.6	5,570.3	110	4,884.9	6,243.9	108	4,989.8	5,692.2
TX	415	23,504.6	24,782.4	399	21,071.0	26,638.5	384	19,630.8	26,548.6
UT	10	520.5	372.3	11	521.5	377.6	11	531.5	340.9
WV	6	410.0	698.0	6	416.0	715.9	7	430.0	794.4
WY	40	1,912.6	1,683.1	39	1,815.2	1,801.6	41	1,897.9	1,627.7
TOTAL U.S.	880	68,943.0	55,171.3	861	67,883.7	60,094.3	862	67,729.1	56,378.1

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(1) Products include ethane, propane, butane, normal or unsplit butane LP-gas mix, raw NGL mix, debut natural gasoline and other.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

WORLD GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION(1)
(As of January 1)

	1984			1985			1986		
Country	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)
Abu Dhabi	4	2,048.0	2,790.3	5	2,498.0	1,179.3	5	2,498.0	1,179.3
Algeria	4	5,335.2	6,082.0	4	5,335.2	6,082.0	4	5,335.2	6,082.0
Argentina	11	1,715.9	1,656.2	11	1,715.9	1,656.2	11	1,715.9	1,701.7
Australia	4	1,707.0	1,932.0	4	1,707.0	1,920.0	5	2,070.0	6,284.0
Austria	2	5.7	0.9	2	5.7	0.3	2	5.7	0
Bahrain	1	127.7	353.8	1	145.0	354.9	1	143.0	335.4
Bangladesh	0	0	0	8	460.0	16.2	8	460.0	16.2
Bolivia	2	474.0	32.6	2	474.0	32.6	2	474.0	32.6
Brazil	5	295.3	448.6	5	312.0	598.3	6	369.4	711.7
Brunei	1	48.0	49.6	2	998.0	314.4	2	998.0	319.6
Canada	346	19,465.3	14,209.1	385	22,001.8	15,133.4	403	22,807.9	17,381.7
Chile	2	445.0	436.1	2	470.0	452.0	2	470.0	452.0
China, Taiwan	4	271.0	132.5	4	271.0	132.5	4	271.0	110.3
Colombia	2	125.0	187.0	2	125.0	187.0	2	125.0	157.9
Denmark	0	0	0	1	405.0	0	1	405.0	0.9
Dominican Rep.	1	0	277.2	1	0	277.2	1	0	277.2
Dubai	0	0	0	1	330.0	1,176.0	1	330.0	1,016.4
Ecuador	2	0	11.5	2	0	11.5	2	0	11.5
Egypt	4	553.0	1,797.1	7	826.0	928.3	7	969.0	1,122.2
France	1	1,024.0	761.0	1	900.0	740.0	1	777.0	666.0
Germany	5	542.9	0	5	542.9	0	5	542.9	0
Greece	1	9.8	16.0	2	39.0	83.0	1	10.5	85.0
Hungary	12	732.7	831.4	12	788.5	911.2	12	855.9	1,068.4
Indonesia	5	587.8	1,005.2	10	933.2	1,639.9	10	884.3	1,446.5
Italy	14	5,560.0	491.9	16	7,101.0	220.0	16	7,101.0	220.0
Kuwait	1	1,680.0	1,772.0	1	1,680.0	1,772.0	1	1,680.0	1,772.0
Libya	7	1,851.0	6,165.8	7	1,851.0	1,165.8	7	1,851.0	6,165.8
Malaysia	0	0	0	1	250.0	1,111.0	2	282.0	406.0
Mexico	9	3,807.0	10,679.8	9	3,807.0	10,679.8	10	4,334.0	10,017.3
Netherlands	1	330.0	6.3	1	440.0	6.0	1	440.0	4.2
New Zealand	1	96.0	26.5	1	96.0	34.7	1	96.0	34.7
Norway	0	0	0	1	350.0	160.0	2	950.0	368.4
Pakistan	5	1,215.0	32.2	5	950.0	62.4	5	950.0	62.4
Peru	3	50.0	44.2	3	70.0	28.1	2	70.0	38.7
Qatar	2	580.0	696.5	2	578.7	1,777.9	2	580.0	1,096.0
Saudi Arabia	5	4,300.0	1,176.0	5	4,300.0	1,176.0	5	4,300.0	1,176.0
Sharjah	1	250.0	1,316.0	1	500.0	2,436.0	1	580.0	2,520.0
United Kingdom	5	2,435.0	2,424.3	5	2,235.0	2,418.1	7	2,648.2	2,627.5
Venezuela	14	2,696.0	2,788.6	14	2,696.0	2,788.6	17	4,251.0	2,566.8
TOTAL (ex U.S.)	487	60,363.3	60,630.2	551	68,187.9	64,662.6	577	72,675.9	69,534.3

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(1) Products include ethane, propane, butane, normal or unsplit butane, LP-gas mix, raw NGL mix, debut natural gasoline and other.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

BASIC PETROLEUM DATA BOOK

SECTION IX. IMPORTS

Table 1. The Share of Imports in U.S. Domestic Petroleum Demand

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Section IX
Table 1

THE SHARE OF IMPORTS IN U.S. DOMESTIC PETROLEUM DEMAND
(Thousands of Barrels)

Year	Imports	Domestic Demand For Refined Products	Imports as a % of Demand
1947	159,389	1,989,803	8.0
1948	188,144	2,113,678	8.9
1949	235,559	2,118,250	11.1
1950	310,261	2,392,974	13.0
1951	308,194	2,578,766	11.9
1952	348,507	2,668,134	13.1
1953	377,499	2,776,778	13.6
1954	383,955	2,833,896	13.5
1955	455,564	3,089,348	14.7
1956	525,591	3,214,651	16.3
1957	574,589	3,221,949	17.8
1958	620,589	3,327,993	18.6
1959	649,583	3,477,173	18.7
1960	664,111	3,585,820	18.5
1961	699,666	3,641,280	19.2
1962	759,793	3,796,029	20.0
1963	774,713	3,921,364	19.8
1964	826,736	4,034,236	20.5
1965	900,772	4,202,039	21.4
1966	939,162	4,410,796	21.3
1967	925,991	4,584,526	20.2
1968	1,039,369	4,901,789	21.2
1969	1,155,551	5,159,930	22.4
1970	1,248,062	5,364,473	23.3
1971	1,432,880	5,552,560	25.8
1972	1,735,314	5,990,316	29.0
1973	2,283,493	6,317,303	36.1
1974	2,230,947	6,078,239	36.7
1975	2,210,335	5,957,515	37.1
1976	2,676,411	6,390,750	41.9
1977	3,207,106(1)	6,727,468	47.7
1978	2,993,847(1)	6,879,017	43.5
1979	3,062,053(1)	6,757,077	45.3
1980	2,512,636(1)	6,242,445	40.3
1981	2,095,122(1)	5,861,058	35.7
1982	1,806,165(1)	5,582,938	32.4
1983	1,758,457(1)	5,559,364	31.6
1984	1,917,897(1)	5,755,575	33.3

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(1) Excludes crude oil imports into Strategic Petroleum Reserve: 1977 - 7,540; 1978 - 58,798; 1979 - 23,434; 1980 - 16,067; 1981 - 93,298; 1982 - 60,193; 1983 - 85,285; 1984 - 72,038

Source: U.S. Energy Information Administration; Annual Petroleum Statements.
1981-1984 - U.S. Energy Information Administration; Petroleum Supply Annu

Section IX
Table 2

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

Year	IMPORTS					Production		
	Crude Oil	Unfinished Oils	Plant Condensate	Refined Products	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1947	97,532	(1)	(2)	61,857	159,389	1,856,987	132,173	1,989,160
1948	129,093	(1)	(2)	59,051	188,144	2,020,185	146,721	2,168,906
1949	153,686	(1)	(2)	81,873	235,559	1,841,940	157,086	1,999,026
1950	177,714	(1)	(2)	132,547	310,261	1,973,574	181,961	2,155,535
1951	179,073	(1)	(2)	129,121	308,194	2,247,711	204,754	2,452,465
1952	209,591	(1)	(2)	138,916	348,507	2,289,836	223,515	2,513,351
1953	236,455	(1)	(2)	141,044	377,499	2,357,082	238,579	2,595,661
1954	239,479	(1)	(2)	144,476	383,955	2,314,988	252,133	2,567,121
1955	285,421	(1)	(2)	170,143	455,564	2,484,428	281,371	2,765,799
1956	341,833	(1)	(2)	183,758	525,591	1,617,283	292,727	2,910,010
1957	373,255	(1)	(2)	201,334	574,589	2,616,901	294,990	2,911,891
1958	348,007	(1)	(2)	272,582	620,589	2,448,987	294,749	2,743,736
1959	352,344	23,072	(2)	274,167	649,583	2,574,590	320,757	2,895,347
1960	371,575	16,478	(2)	276,058	664,111	2,574,933	340,157	2,915,090
1961	381,548	25,348	(2)	292,770	699,666	2,621,758	361,689	2,983,447
1962	411,039	32,516	(2)	316,238	759,793	2,676,189	372,705	3,048,894
1963	412,660	31,702	(2)	330,351	774,713	2,752,723	400,886	3,153,609
1964	438,643	32,587	(2)	355,506	826,736	2,786,822	422,471	3,209,293
1965	452,040	33,706	(2)	415,026	900,772	2,848,514	441,556	3,290,070
1966	447,120	35,236	(2)	456,806	939,162	3,027,763	468,635	3,496,398
1967	411,649	35,225	(2)	479,117	925,991	3,215,742	514,456	3,730,198
1968	472,323	29,350	(2)	537,696	1,039,369	3,329,042	550,311	3,879,353
1969	514,114	38,766	(2)	602,671	1,155,551	3,371,751	580,241	3,951,992
1970	483,293	39,261	2,258	723,250	1,248,062	3,517,450	605,916	4,123,366
1971	613,417	45,193	13,321	760,949	1,432,880	3,453,914	617,815	4,071,729
1972	811,135	45,705	31,428	847,046	1,735,314	3,455,368	638,216	4,093,584
1973	1,183,996	50,161	39,344	1,009,992	2,283,493	3,360,903	634,423	3,995,326
1974	1,269,155	44,228	32,364	885,200	2,230,947	3,202,585	616,098	3,818,683

(1) Separate data not available prior to 1959
(2) Separate data not available prior to 1970

SOURCE: U.S. Bureau of Mines, Crude Petroleum, Petroleum Products and Natural Gas Liquids, Annual and December issues

Section IX
Table 2a

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

	IMPORTS					PRODUCTION		
Year	Crude Oil(3)	Unfinished Oils	Plant Condensate	Refined Products(4)	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1975	1,498,181	12,985	26,972	672,197	2,210,335	3,056,779	595,958	3,652,737
1976	1,935,012	11,735	24,408	705,256	2,676,411	2,976,180	587,045	3,563,225
1977	2,414,327	11,239	15,003	774,077	3,214,646	3,009,265	590,455	3,599,720
1978	2,319,826	9,913	6,017	716,889	3,052,645	3,178,216	572,086	3,750,302
1979	2,379,541	21,372	4,729	680,825	3,086,487	3,121,310	578,023	3,699,333
1980	1,926,162	20,015	3,781	598,745	2,548,703	3,146,365	575,787	3,722,152
1981	1,604,703	40,793	3,658	539,265	2,188,419	3,128,624	587,119	3,715,743
1982	1,273,214	63,657	2,292	527,195	1,866,358	3,156,715	565,876	3,722,591
1983	1,215,225	85,580	2,355	540,584	1,843,744	3,170,999	568,926	3,739,925
1984	1,253,949	84,496	N.A.	651,491	1,989,935	3,249,696	596,477	3,846,173
1985	1,168,297	115,979	N.A.	565,231	1,849,508	3,274,553	587,358	3,861,911
Jan.	84,217	4,815	N.A.	47,834	136,866	270,926	50,454	321,380
Feb.	59,015	6,446	N.A.	43,924	109,568	252,695	45,446	298,141
Mar.	86,364	9,109	N.A.	49,388	144,861	281,943	49,602	331,545
Apr.	102,045	12,106	N.A.	45,333	159,483	271,299	47,457	318,756
May	115,637	15,788	N.A.	47,640	179,065	283,093	49,408	332,501
Jun.	95,645	11,027	N.A.	41,206	147,878	270,653	47,909	318,562
Jul.	99,286	11,220	N.A.	42,931	153,437	277,410	48,606	326,016
Aug.	96,547	13,142	N.A.	36,559	146,248	272,881	49,423	322,304
Sep.	94,646	8,771	N.A.	45,696	149,113	268,610	47,252	315,862
Oct.	100,377	8,240	N.A.	50,136	158,754	278,068	49,914	327,982
Nov.	119,957	8,552	N.A.	54,974	183,483	267,059	49,808	316,867
Dec.	114,561	6,762	N.A.	59,428	180,750	279,916	52,079	331,995
1986	1,524,978	91,269	N.A.	655,335	2,271,582	3,168,252	566,000	3,734,252
Jan.	107,627	8,464	N.A.	56,663	172,754	283,248	53,031	336,279
Feb.	83,100	4,675	N.A.	43,166	130,941	256,855	47,495	304,350
Mar.	92,641	7,468	N.A.	45,965	146,074	279,413	49,734	329,147
Apr.	110,520	9,034	N.A.	43,629	163,183	265,917	45,686	311,603
May	131,757	9,928	N.A.	56,712	198,397	273,964	47,827	321,791
Jun.	139,053	7,720	N.A.	58,663	205,436	258,700	45,115	303,815
Jul.	146,509	6,956	N.A.	61,726	215,191	268,448	46,728	315,176
Aug.	150,637	6,233	N.A.	65,340	222,210	259,580	44,784	304,364
Sep.	150,923	7,879	N.A.	53,888	212,690	249,843	44,050	293,893
Oct.	136,983	7,138	N.A.	55,120	199,241	260,984	45,778	306,762
Nov.	138,444	8,284	N.A.	51,025	197,753	252,374	47,083	299,457
Dec.	136,784	7,490	N.A.	63,438	207,712	258,926	48,689	307,615

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(3) Includes crude oil imported into the Strategic Petroleum Reserve.
(4) Excludes unfinished oils and plant condensate.

SOURCE: 1975-1980--U.S. Energy Informaton Administration, Annual Petroleum Statements.
1981-1986--U.S. Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 2b

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

	IMPORTS					PRODUCTION		
Year	Crude Oil(3)	Unfinished Oils	Plant Condensate	Refined Products(4)	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1987	1,705,922	109,298	N.A.	622,139	2,437,378	3,047,378	582,291	3,629,669
Jan.	135,943	5,883	N.A.	55,122	196,948	262,888	49,055	311,943
Feb.	108,260	8,697	N.A.	50,608	167,565	234,880	45,306	280,186
Mar.	117,160	10,797	N.A.	51,655	179,612	262,398	49,529	311,927
Apr.	123,964	9,348	N.A.	44,023	177,335	254,945	47,688	302,633
May	134,549	8,745	N.A.	44,957	188,251	258,426	49,150	307,576
Jun.	144,197	12,906	N.A.	45,958	203,061	248,356	47,352	295,708
Jul.	164,131	7,786	N.A.	63,302	235,219	255,782	49,037	304,819
Aug.	170,802	8,448	N.A.	51,816	231,066	254,508	48,701	303,209
Sep.	153,312	8,179	N.A.	53,848	215,339	246,163	47,450	293,613
Oct.	159,390	9,800	N.A.	49,903	219,093	259,272	49,670	308,942
Nov.	150,389	8,310	N.A.	53,332	212,031	251,915	49,103	301,018
Dec.	148,825	10,399	N.A.	57,614	211,838	257,844	50,250	308,094
1988								
Jan.	143,190	11,754	N.A.	58,951	213,895	255,582	48,648	304,230
Feb.	136,080	8,408	N.A.	58,366	202,854	242,892	46,219	289,111
Mar.	148,434	9,078	N.A.	51,012	208,524	258,771	50,459	309,230
Apr.	153,782	12,228	N.A.	45,480	211,490	248,028	48,273	296,301
May	162,269	12,202	N.A.	49,274	223,745	254,291	50,359	304,650

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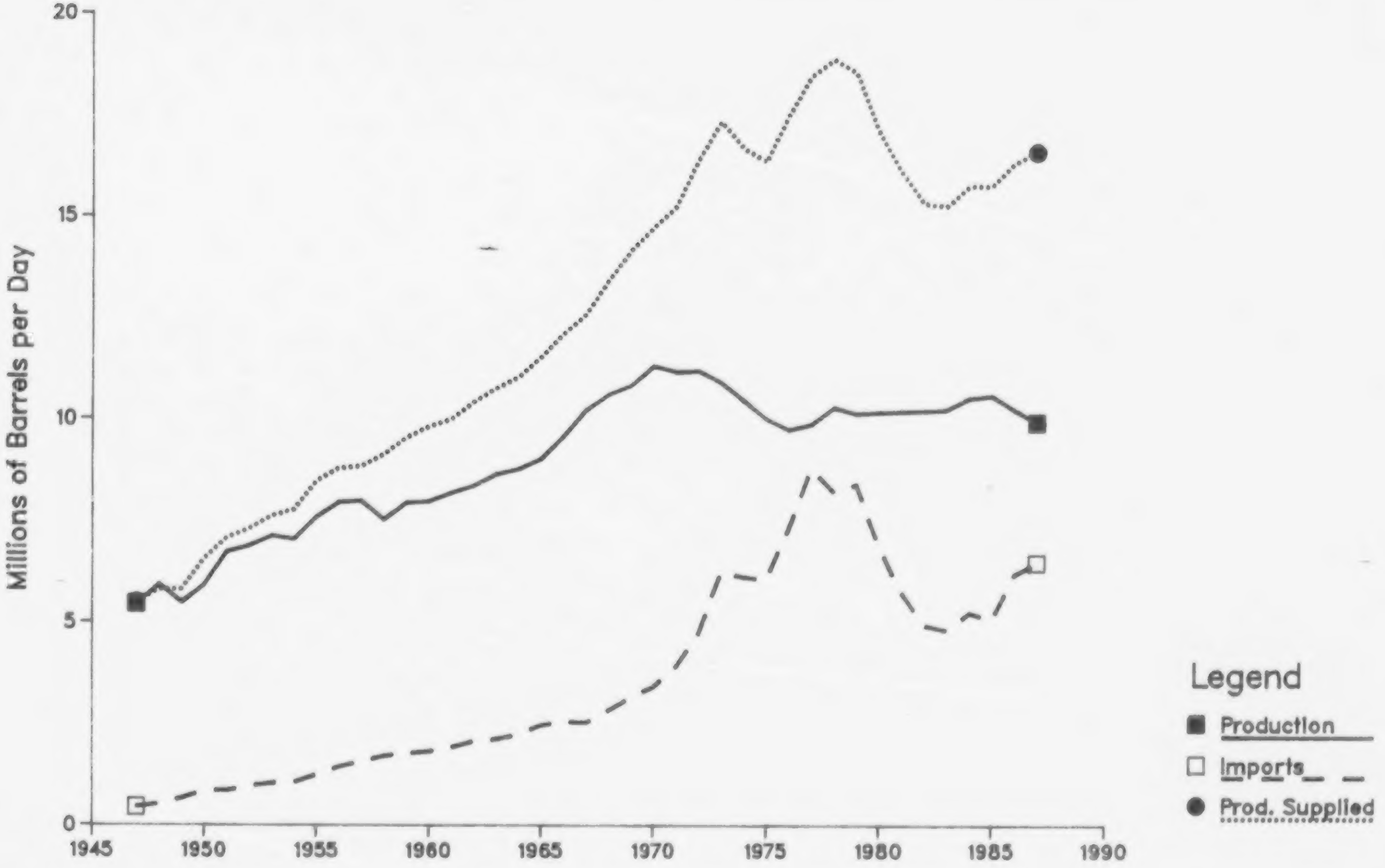
(3) Includes crude oil imported into the Strategic Petroleum Reserve.
(4) Excludes unfinished oils and plant condensate.

SOURCE: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual and Monthlies.

U.S. PRODUCTION, IMPORTS AND PRODUCT SUPPLIED



Source: Department of Energy

U.S. CRUDE OIL IMPORTS BY AREA
(Thousands of Barrels)

Year	Western Hemisphere	Africa	Middle East	All Others	Total
1947	97,146	--	386	--	97,532
1948	105,912	--	23,181	--	129,093
1949	116,736	--	36,950	--	153,686
1950	136,096	--	41,618	--	177,714
1951	138,074	--	37,501	3,498	179,073
1952	147,771	--	56,556	5,264	209,591
1953	141,552	--	80,930	13,969	236,451
1954	148,010	--	77,764	13,705	239,479
1955	173,166	--	100,344	11,941	285,451
1956	225,007	--	103,517	13,309	341,833
1957	261,736	--	87,798	23,719	373,253
1958	199,256	--	123,091	25,732	348,079
1959	212,707	--	115,875	23,762	352,344
1960	230,229	1,451	113,175	26,720	371,575
1961	237,995	1,887	118,997	22,669	381,548
1962	267,680	9,808	109,071	24,480	411,039
1963	278,933	9,173	103,214	21,340	412,660
1964	289,012	17,743	108,841	23,047	438,643
1965	283,377	24,585	121,908	22,170	452,040
1966	289,800	31,543	107,579	18,198	447,120
1967	301,002	20,151	67,977	22,519	411,649
1968	315,977	57,461	72,330	26,555	472,323
1969	337,847	82,380	61,616	32,271	514,114
1970	351,366	44,365	61,892	25,670	483,293
1971	378,102	68,361	124,155	42,779	613,397
1972	421,799	172,105	155,982	61,249	811,135
1973	532,238	285,481	292,988	73,289	1,183,996
1974	446,534	356,121	362,186	104,314	1,269,155

Source: U.S. Bureau of Mines, Crude Petroleum, Petroleum products and Natural Gas Liquids, Annual and December issues.

Section IX
Table 3a

U.S. CRUDE OIL IMPORTS BY AREA
(Thousands of Barrels)

Year	Western Hemisphere	Africa	Middle East	All Others	Total
1975	453,772	488,515	409,496	146,398	1,498,181
1976	316,202	716,661	681,189	220,965	1,935,012
1977	328,468	912,631	910,744	262,484	2,414,327
1978	345,624	830,773	832,305	311,124	2,319,826
1979	436,525	910,644	765,249	267,123	2,379,541
1980	379,813	731,342	561,248	253,759	1,926,162
1981	352,373	486,768	447,518	318,044	1,604,703
1982	430,885	282,706	248,560	311,163	1,273,214
1983	497,237	247,555	160,221	310,213	1,215,225
1984	508,983	225,929	168,336	350,701	1,253,949
1985	605,771	213,090	89,583	259,853	1,169,297
1986	670,239	266,946	300,207	287,586	1,524,978
1987	699,301	363,829	359,628	283,164	1,705,922

Source: 1975-1980 -- U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 4

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Argentina	--	--	--	--	--	--	--	--	--	--
Bolivia	--	--	--	--	--	--	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	--
Canada	--	--	--	5	473	1,113	2,650	2,606	16,395	43,227
Chile	--	--	--	--	--	--	--	--	--	--
Colombia	10,944	8,542	11,425	15,699	16,683	16,234	15,200	12,656	8,143	9,176
Curacao and Aruba	5,125	4,707	613	--	--	--	--	--	--	--
Ecuador	--	--	--	--	--	--	90	300	409	431
Mexico	5,578	3,601	4,250	9840	12,889	8,344	4,342	5,151	6,159	6,094
Peru	--	--	--	--	--	--	--	609	856	614
Trinidad	--	--	89	216	220	--	--	459	--	431
Venezuela	75,499	89,062	101,726	107,726	105,739	119,325	120,755	129,737	148,755	177,199
Total Western Hemisphere	97,146	105,912	117,484	133,486	136,004	145,016	143,037	151,517	180,899	237,963
Algeria	--	--	--	--	--	--	--	--	--	--
Angola	--	--	--	--	--	--	--	--	--	--
Egypt	--	--	--	--	--	--	--	--	--	--
Gabon	--	--	--	--	--	--	--	--	--	--
Libya	--	--	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--	--	--
Tunisia	--	--	--	--	--	--	--	--	--	--
Total Africa	--	--	--	--	--	--	--	--	--	--
Abu Dhabi	--	--	--	--	--	--	--	--	--	--
Iran	--	4,507	1,356	123	--	--	--	208	3,075	6,156
Iraq	--	766	344	--	--	706	1,576	2,188	7,012	9,880
Kuwait	111	3,442	23,075	26,163	21,648	26,652	38,569	41,842	56,276	52,298
Qatar	--	--	--	116	--	404	3,150	2,751	5,447	5,995
Saudi Arabia	275	14,466	12,460	14,032	16,161	29,461	37,150	30,311	29,609	29,222
Total Middle East	386	23,181	37,235	40,434	37,809	57,223	80,445	77,300	101,419	103,551
Borneo	--	--	--	--	3,543	1,605	--	--	--	--
Australia	--	--	--	--	--	--	--	--	--	--
Indonesia (Sumatra)	--	--	--	--	--	3,648	14,426	13,828	11,778	13,213
Malaysia	--	--	--	--	--	--	--	--	--	--
Total Far East	--	--	--	--	3,543	5,253	14,426	13,828	11,778	13,213
U.S.S.R.	--	--	--	--	--	--	--	--	--	--
Total Eastern Hemisphere	386	23,181	37,235	40,434	41,352	62,476	94,871	91,128	113,197	116,764
ANNUALTOTAL	97,532	129,093	154,719	173,920	177,356	207,492	237,908	242,645	294,096	354,727

Source: U.S. Bureau of Mines, Annual Petroleum Statements

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Argentina	--	--	--	--	--	--	--	--	--	--
Bolivia	--	--	--	--	--	--	--	--	--	1,237
Brazil	--	402	1012	309	1,776	1,277	2,052	--	--	--
Canada	53,804	30,621	33,902	40,866	65,819	85,152	90,394	101,607	107,762	126,712
Chile	--	--	--	--	--	--	--	--	--	--
Colombia	8,491	9,770	11,525	15,489	10,069	8,614	8,293	[illegible]606	15,211	14,424
Curacao and Aruba	--	--	--	--	--	--	--	--	--	--
Ecuador	454	--	--	--	--	--	--	--	--	--
Mexico	3,187	999	229	766	6,835	3,644	3,657	3,577	2,552	--
Peru	--	--	--	--	--	--	--	--	--	--
Trinidad	1,175	329	92	219	172	--	--	--	--	--
Venezuela	208,642	191,559	195,240	200,528	180,387	168,993	174,537	174,222	157,852	147,427
Total Western Hemisphere	276,252	235,204	242,812	260,198	267,231	267,680	278,933	289,012	283,377	289,800
Algeria	--	--	--	284	--	1,543	380	2,249	3,256	1,400
Angola	--	--	--	--	--	--	--	--	--	--
Egypt	--	--	--	1,175	1,887	1,543	1,772	1,077	881	852
Gabon	--	--	--	--	--	--	--	--	--	--
Libya	--	--	--	--	--	6,722	7,021	14,417	15,152	25,177
Nigeria	--	--	--	--	--	--	--	--	5,296	4,114
Tunisia	--	--	--	--	--	--	--	--	--	--
Total Africa	--	--	--	1,459	1,887	9,808	9,173	17,743	24,585	31,543
Abu Dhabi/ United Arab Emirates(5)	--	--	--	--	--	--	--	1,112	5,035	4,781
Iran	5,176	5,829	9,699	11,170	22,780	17,735	22,717	24,143	28,633	30,833
Iraq	5,649	8,411	8,541	7,927	9,297	856	321	--	5,695	9,447
Kuwait	59,446	81,037	72,201	60,402	51,366	40,749	29,680	23,263	20,208	9,543
Neutral Zone	--	684	189	239	295	15,837	15,855	17,565	9,756	7,028
Qatar	2,257	1,538	733	1,408	12,999	9,535	5,835	7,294	4,346	176
Saudi Arabia	12,595	27,159	26,187	29,989	24,211	24,359	28,806	35,464	48,235	45,771
Total Middle East	85,123	124,658	117,550	111,135	120,371	109,071	103,214	108,841	121,908	107,579
Australia	--	--	--	--	--	--	--	--	--	--
Indonesia (Sumatra)	24,226	23,845	24,235	28,054	22,780	24,480	21,340	23,047	22,170	18,198
Malaysia	--	--	--	--	--	--	--	--	--	--
Total Far East	24,226	23,845	24,235	28,054	22,780	24,480	21,340	23,047	22,170	18,198
U.S.S.R.	--	--	--	--	--	--	--	--	--	--
Total Eastern Hemisphere	109,550	148,503	141,785	140,648	144,737	143,359	133,727	149,631	168,663	157,320
ANNUAL TOTAL	385,802	383,707	384,597	400,846	411,968	411,039	412,660	438,643	452,040	447,120

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(5) Figures from 1947-1971 reflect Abu Dhabi only. Beginning 1972 Abu Dhabi, Dubai and Sharjah formed the United Arab Emirates.

Source: U.S. Bureau of Mines, December and Annual Petroleum Statements

Section IX
Table 4b

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Bolivia	7,016	6,866	5,596	534	798	--	891	2,467	1,940	1,849
Canada	150,409	169,418	203,298	245,258	263,294	312,440	365,370	288,763	219,175	135,690
Colombia	11,855	11,981	15,551	7,313	3,175	1,695	778	--	--	2,041
Ecuador	--	--	--	--	--	5,331	17,229	15,225	20,679	18,671
Mexico	--	--	--	--	--	--	489	597	25,660	31,670
Trinidad	--	--	--	265	--	8,626	21,739	23,045	42,097	38,142
Venezuela	131,089	125,737	111,722	97,996	110,574	93,300	125,742	116,437	144,221	88,139
Total Western Hemisphere	301,002	315,977	337,847	351,366	378,102	421,799	532,238	446,534	453,772	316,202
United Kingdom	--	--	--	--	--	--	--	--	125	4,923
Netherlands	--	--	--	--	--	--	--	--	1,500	--
Norway	--	--	--	--	--	--	--	322	4,552	12,881
Total Europe	--	--	--	--	--	--	--	322	6,177	17,804
Algeria	1,447	1,944	358	2,093	4,685	31,573	43,619	65,764	96,459	149,190
Angola	--	--	424	--	1,301	5,785	17,753	17,536	26,051	2,426
Congo (Brazzaville)	--	--	--	--	--	--	--	670	--	3,142
Egypt(UAR)	1,318	10,795	14,778	7,626	6,924	3,091	5,296	3,227	1,687	6,311
Gabon	661	--	--	--	--	--	--	8,552	9,811	9,685
Libya	15,293	41,591	48,862	17,156	19,426	40,069	48,585	1,495	81,403	162,457
Nigeria	1,432	3,131	17,958	17,490	34,826	88,887	163,687	254,358	272,265	370,962
Tunisia	--	--	--	--	1,199	2,520	6,541	4,519	839	5,400
Zaire	--	--	--	--	--	--	--	--	--	7,088
Total Africa	20,151	57,461	82,380	44,365	68,361	172,105	285,481	356,121	488,515	716,661
United Arab Emirates	1,936	5,605	5,051	23,047	29,026	26,873	25,764	25,158	42,585	93,105
Iran	23,781	21,154	15,306	12,184	38,576	49,700	78,990	168,956	101,575	109,073
Iraq	1,716	--	--	--	3,932	1,315	1,529	--	707	9,542
Israel	--	--	--	--	--	--	309	--	--	2,368
Kuwait	6,859	15,863	12,539	12,123	10,650	13,205	15,208	1,820	1,444	451
Oman	--	--	--	--	--	--	--	236	492	10,943
Qatar	--	--	191	--	--	1,263	2,663	6,189	6,657	8,631
Saudi Arabia	29,679	18,959	12,665	6,140	41,971	63,626	168,525	159,827	256,036	447,071
Total Middle East	67,977	72,330	61,616	61,892	124,155	155,982	292,988	362,186	409,496	681,184
Australia	--	--	--	--	2,567	327	--	--	--	--
Indonesia	22,519	26,555	32,271	25,670	40,232	59,633	73,055	103,482	138,270	196,599
Malaysia	--	--	--	--	--	966	234	510	1,951	5,914
Total Far East	22,519	26,555	32,271	25,670	42,799	60,926	73,289	103,992	140,221	202,513
U.S.S.R.	--	--	--	--	--	323	--	--	--	648
Total Eastern Hemisphere	110,647	156,346	176,267	131,927	235,315	389,336	651,758	822,621	1,044,409	1,618,810
ANNUAL TOTAL	411,649	472,323	514,114	483,293	613,417	811,135	1,183,996	1,269,155	1,498,181	1,935,012

Source: Energy Information Administration, Annual Petroleum Statements.
1981-1982 -- Energy Information Administration, Petroleum Supply Annual.

Section IX
Table 4c

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Bolivia	1,271	308	328	301	--	--	1,361	260	--	268
Canada	101,778	90,490	99,081	73,002	59,904	78,041	100,142	124,687	170,800	208,163
Colombia	--	--	--	--	--	--	--	--	--	20,715
Ecuador	20,229	13,910	11,010	6,129	13,967	11,788	20,594	17,066	20,334	23,408
Mexico	64,711	115,426	159,616	185,541	171,363	235,298	279,703	241,054	261,019	226,533
Trinidad & Tobago	48,841	51,974	44,950	42,011	37,186	33,541	30,207	31,939	35,595	34,060
Venezuela	91,331	66,125	106,794	56,950	53,590	56,434	59,854	92,728	111,627	151,937
Total Western Hemisphere	328,468	345,624	436,525	379,813	352,373	430,885	497,237	508,983	605,771	670,239
United Kingdom	35,583	61,555	71,923	63,459	134,766	161,061	133,142	138,246	101,552	115,659
Netherlands	1,509	846	2,685	22	1	3	1,039	1,046	--	--
Norway	17,628	37,815	27,523	52,727	41,452	37,299	23,836	40,927	11,311	19,403
Total Europe	54,720	100,216	102,131	116,208	176,315	198,365	193,529	180,219	113,096	135,062
Algeria	198,468	231,253	222,042	166,980	95,165	32,714	64,274	71,074	30,524	28,423
Angola	6,150	2,290	14,088	13,389	16,528	15,248	25,763	31,172	37,889	37,076
Congo	2,440	5,454	909	2,658	1,276	456	6,616	12,226	5,962	7,188
Egypt	13,034	7,395	20,205	11,249	12,155	14,683	8,958	3,485	956	3,620
Gabon	12,632	13,841	15,328	9,062	12,633	14,429	21,415	20,838	18,797	8,959
Libya	256,984	232,897	234,173	200,406	115,572	8,452	--	--	--	--
Nigeria	412,498	332,035	390,116	307,840	222,981	186,329	109,807	75,669	102,134	159,683
Tunisia	10,425	4,460	6,429	2,801	4,104	3,481	2,564	4	4,259	1,230
Zaire	--	263	1,379	4,690	5,977	6,914	8,158	11,460	12,569	9,490
Total Africa	912,631	830,773	910,644	731,342	486,768	282,706	247,555	225,929	213,090	266,946
United Arab Emirates	121,640	140,653	102,709	63,052	27,950	29,509	6,641	32,966	12,760	13,806
Iran	193,415	202,357	108,269	3,086	--	12,854	17,575	3,706	9,919	7,078
Iraq	26,894	22,673	32,052	10,328	--	974	3,758	4,554	16,889	29,401
Israel	--	--	--	--	--	--	--	--	--	--
Kuwait	15,434	1,718	1,898	9,712	--	904	2,641	8,780	1,316	10,106
Oman	27,140	22,240	13,466	8,693	8,702	8,183	12,281	3,755	655	2,897
Qatar	24,281	23,224	11,450	7,920	2,665	2,600	--	1,497	--	4,365
Saudi Arabia	501,072	416,910	491,514	457,671	406,059	193,536	117,325	113,078	48,044	225,627
Total Middle East	910,744	832,305	765,249	561,248	447,518	248,560	160,221	168,336	89,583	300,207
Australia	--	--	--	--	--	--	--	9,177	7,557	10,973
Indonesia	184,984	194,620	138,528	114,990	116,126	82,315	115,156	111,404	106,654	108,376
Malaysia	20,257	13,677	18,954	22,213	12,143	6,574	930	--	301	3,883
Total Far East	207,089	210,632	159,933	137,551	128,269	90,023	116,683	126,196	146,755	152,522
U.S.S.R.	675	276	--	--	--	--	--	--	--	2
Total Eastern Hemisphere	2,085,859	1,974,202	1,943,016	1,546,349	1,252,330	842,429	717,988	744,966	562,524	854,739
ANNUAL TOTAL	2,414,327	2,319,826	2,379,541	1,926,162	1,604,703	1,273,214	1,215,225	1,253,949	1,168,297	1,524,978

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 4d

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1987
Bolivia	--
Canada	221,980
Colombia	41,809
Ecuador	8,217
Mexico	219,552
Trinidad & Tobago	27,408
Venezuela	178,163
Total Western Hemisphere	699,301
United Kingdom	111,060
Netherlands	--
Norway	25,395
Total Europe	136,665
Algeria	41,932
Angola	65,657
Congo	5,960
Egypt	19,884
Gabon	12,655
Libya	--
Nigeria	193,004
Tunisia	--
Zaire	8,128
Total Africa	363,829
United Arab Emirates	20,602
Iran	35,952
Iraq	29,842
Israel	--
Kuwait	25,630
Oman	12,831
Qatar	--
Saudi Arabia	234,213
Total Middle East	359,628
Australia	17,592
Indonesia	95,775
Malaysia	4,464
Total Far East	148,299
U.S.S.R.	--
Total Eastern Hemisphere	1,006,621
ANNUAL TOTAL	1,705,922

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1987.

Section IX
Table 5

U.S. IMPORTS OF CRUDE OIL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year	P.A.D.D. I	P.A.D.D. II	P.A.D.D. III	P.A.D.D. IV	P.A.D.D. V	Imported Crude Oil
1952(1)	192,349	1,116	4,423	--	11,703	209,591
1953	202,611	2,562	2,871	--	28,411	236,455
1954	213,413	2,772	4,553	--	18,741	239,479
1955	232,850	7,425	11,098	--	34,048	285,421
1956	244,453	19,904	11,917	70	65,489	341,833
1957	247,395	22,296	8,726	86	94,749	373,255
1958	238,769	25,328	16,242	13	67,655	348,007
1959	235,259	21,279	10,184	15	85,607	352,344
1960	244,196	23,265	2,939	20	101,155	371,575
1961	236,905	30,971	2,354	30	111,288	381,548
1962	244,235	34,646	2,489	682	128,987	411,039
1963	248,199	34,666	1,698	3,528	124,569	412,660
1964	252,527	37,801	1,835	4,409	142,071	438,643
1965	258,361	41,264	--	4,807	147,608	452,040
1966	259,499	48,114	449	4,954	134,104	447,120
1967	216,920	56,408	672	6,648	131,001	411,649
1968	263,866	78,365	741	10,058	119,393	472,323
1969	269,007	88,434	--	12,714	143,959	514,114
1970	211,403	115,613	--	17,573	138,704	483,293
1971	252,088	137,064	20,449	16,869	186,947	613,417
1972	354,549	171,338	28,331	14,126	242,791	811,135
1973	466,074	260,368	145,654	16,132	295,768	1,183,996
1974	428,608	250,771	289,999	16,579	283,198	1,269,155
1975	451,549	282,658	437,049	16,090	310,835	1,498,181
1976	517,840	366,107	651,381	19,878	379,806	1,935,012
1977(2)	553,955	516,775	927,596	15,957	400,044	2,414,327
1978(2)	542,856	494,132	1,045,691	18,132	219,015	2,319,826
1979(2)	522,580	556,861	1,083,749	23,656	192,695	2,379,541
1980(2)	491,292	409,533	854,233	14,268	156,836	1,926,162
1981(2)	407,384	248,393	828,287	10,513	110,126	1,604,703
1982(2)	349,583	211,727	628,591	14,625	68,687	1,273,214
1983(2)	298,070	193,427	632,974	13,959	76,794	1,215,225
1984(2)	345,642	182,565	639,238	12,233	74,271	1,253,949

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(1) Figures not available by P.A.D.D. prior to 1952.
(2) Figures include crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Bureau of Mines, 1952-1972 Minerals Yearbook
U.S. Energy Information Administration 1973-1980 Annual Petroleum Statements
U.S. Energy Information Administration 1981-1984 -- Petroleum Supply Annuals

Section IX
Table 5a

U.S. IMPORTS OF CRUDE OIL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year	P.A.D.D. I	P.A.D.D. II	P.A.D.D. III	P.A.D.D. IV	P.A.D.D. V	Total Imported Crude Oil
1985(2)	356,697	215,179	517,861	14,056	64,505	1,168,297
1986(2)	394,490	286,276	756,465	19,613	68,134	1,524,978
1987(2)	405,596	317,384	887,454	23,563	71,925	1,705,922

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(2) Figures include crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.

Section IX
Table 6

U.S. IMPORTS OF RESIDUAL AND DISTILLATE FUEL BY P.A.D. DISTRICTS
(Thousands of Barrels)

	P.A.D.D. I		P.A.D.D. II		P.A.D.D. III		P.A.D.D. IV		P.A.D.D. V		Totals	
Year	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil
1950	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	120,036	2,602
1951	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	119,166	1,767
1952	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	128,479	2,742
1953	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	131,533	3,379
1954	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	129,124	3,195
1955	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	152,035	4,413
1956	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	162,869	5,159
1957	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	173,229	8,566
1958	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	182,306	14,892
1959(2)	219,341	17,283	230	13	2,981	360	1	2	18	0	222,571	17,658
1960	211,788	11,365	59	12	14,416	1,298	0	96	6,945	0	233,208	12,771
1961	214,453	15,533	284	24	12,320	1,654	1	142	16,210	24	243,268	17,377
1962	237,565	9,811	610	31	11,775	1,892	47	92	14,317	5	264,314	11,831
1963	252,785	7,787	800	63	12,327	1,250	26	1	6,815	9	272,753	9,110
1964	274,306	10,559	804	64	11,204	1,119	45	0	9,412	43	295,771	11,785
1965	318,634	11,041	1,188	17	14,598	1,811	43	0	10,724	133	345,187	13,002
1966	357,907	12,548	860	107	11,708	967	55	0	6,265	223	376,795	13,845
1967	383,260	16,851	587	224	7,475	891	60	0	4,557	526	395,939	18,492
1968	394,528	45,502	573	360	8,271	1,290	54	0	6,502	996	409,928	48,148
1969	440,983	47,720	627	1,264	12,167	937	78	0	7,756	962	461,611	50,883
1970	536,968	49,333	4,207	2,223	11,029	1,192	52	0	5,589	1,078	557,845	53,826
1971	558,771	53,373	3,953	258	6,553	1,079	41	0	8,382	1,073	577,700	55,783
1972	616,990	64,302	5,458	473	6,212	1,191	0	0	8,741	483	637,401	66,449
1973	639,611	125,210	6,068	1,353	10,471	12,406	0	104	20,075	4,076	676,225	143,149
1974	538,573	95,018	7,919	621	11,806	6,766	--	32	20,859	3,142	579,157	105,579

(1) Figures not available by P.A.D. prior to 1959.
(2) Beginning in 1959, figures include receipts from Puerto Rico and Virgin Islands.

Source: U.S. Bureau of Mines. 1950-1972, Minerals Yearbook
1973-1974, Crude Petroleum, Petroleum Products, and Natural Gas Liquids; Annual and December issues

U.S. IMPORTS OF RESIDUAL AND DISTILLATE FUEL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year(2)	P.A.D.D. I Residual Fuel Oil	P.A.D.D. I Distillate Fuel Oil	P.A.D.D. II Residual Fuel Oil	P.A.D.D. II Distillate Fuel Oil	P.A.D.D. III Residual Fuel Oil	P.A.D.D. III Distillate Fuel Oil	P.A.D.D. IV Residual Fuel Oil	P.A.D.D. IV Distillate Fuel Oil	P.A.D.D. V Residual Fuel Oil	P.A.D.D. V Distillate Fuel Oil	Totals Residual Fuel Oil	Totals Distillate Fuel Oil
1975	416,105	54,300	14,015	223	3,957	1,441	--	1	12,451	713	446,528	56,678
1976	495,980	49,225	11,720	97	1,728	680	--	--	7,897	3,518	517,325	53,520
1977	467,124	88,171	11,754	55	818	413	--	--	16,369	2,673	496,065	91,318
1978	468,937	59,023	17,101	306	939	210	--	--	7,663	3,749	494,640	63,288
1979	392,861	64,091	14,267	70	2,044	1,568	--	4	10,972	4,756	420,144	70,489
1980	317,157	48,518	10,754	--	6,485	1,268	--	--	9,161	2,122	343,557	51,908
1981	260,156	59,180	8,592	5	14,055	2,634	--	2	9,266	1,251	292,070	63,070
1982	235,912	29,763	3,966	392	35,700	1,526	9	4	7,514	2,355	283,101	34,040
1983	222,276	56,129	5,375	3,075	19,555	2,189	193	488	7,814	1,660	255,213	63,542
1984	218,730	91,885	2,069	2,999	23,488	1,029	158	1,300	4,766	2,227	249,211	99,439
1985	163,779	64,576	907	2,652	16,579	855	131	1,363	4,888	3,643	186,284	73,089
1986	221,943	82,414	1,394	2,857	13,372	864	50	966	7,394	3,195	244,153	90,296
1987	192,337	84,822	1,316	3,394	9,702	2,855	10	804	2,773	1,301	206,138	93,176

(2) Figures include receipts from Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 7

U.S. IMPORTS OF UNFINISHED OILS AND REFINED PRODUCTS BY P.A.D. DISTRICTS(2)
(Thousands of Barrels)

	P.A.D.D. I		P.A.D.D. II		P.A.D.D. III		P.A.D.D. IV		P.A.D.D. V		Totals	
Year	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products
1959(1)	16,628	264,347	587	606	2,148	4,861	--	31	3,709	4,322	23,072	274,167
1960	9,534	248,388	520	1,019	994	16,788	--	121	5,430	9,742	15,478	276,058
1961	18,045	256,484	1,184	1,324	145	15,258	--	180	5,974	19,524	25,348	292,770
1962	22,297	279,475	360	1,746	1,616	15,101	--	154	8,243	19,672	32,516	316,238
1963	21,779	299,530	476	2,193	2,102	14,952	--	39	7,345	13,637	31,702	330,351
1964	21,151	321,994	478	3,552	1,011	13,117	--	159	9,947	16,684	32,587	355,506
1965	23,260	369,760	213	5,739	377	18,073	--	727	9,856	20,727	33,706	415,026
1966	26,743	410,435	43	7,276	15	13,826	--	971	8,435	24,298	35,236	456,806
1967	23,222	434,265	20	7,171	276	9,873	--	879	11,707	26,929	35,225	479,117
1968	21,987	489,628	1	7,573	109	10,618	--	2,253	7,253	27,624	29,350	537,696
1969	28,975	543,947	51	8,245	1,034	15,087	--	2,979	8,706	32,413	38,766	602,671
1970	30,221	651,123(3)	--	20,022(3)	913	21,191	--	3,192(3)	8,127	29,980(3)	39,261	725,508(3)
1971	30,651	685,309(3)	--	22,918(3)	2,217	17,425	--	7,786(3)	12,325	43,832(3)	45,193	777,270(3)
1972	30,715	761,491(3)	--	39,798(3)	1,548	16,474	--	16,623(3)	13,442	44,088(3)	45,705	878,474(3)
1973	26,216	874,707(3)	739	53,985(3)	10,681	45,714	--	16,285(3)	12,525	58,645(3)	50,161	1,049,336
1974	14,084	757,416(3)	1,155	49,860(3)	19,208	43,356(3)	--	14,143(3)	9,781	52,789(3)	44,228	917,564(3)
1975	6,038	578,739(3)	392	49,345(3)	4,170	15,989(3)	--	12,327(3)	2,385	42,769(3)	12,985	699,169(3)
1976	7,721	619,068	16	34,334	3,750	13,382	--	5,888(3)	248	32,584	11,735	705,256
1977	9,333	665,984	15	43,912	905	17,422	--	5,922	986	40,659	11,239	773,899
1978	9,022	614,132	15	45,676	226	8,427	--	4,635	650	43,998	9,913	716,868
1979	7,945	545,758	338	68,663	7,687	21,135	--	4,737	5,402	40,532	21,372	680,825
1980	11,489	446,336	217	68,505	5,855	25,986	--	5,222	2,454	32,696	20,015	578,745
1981	18,096	392,310	396	69,554	19,442	39,355	--	7,877	2,858	33,827	40,792	542,923
1982	23,182	355,073	2,708	65,611	35,027	63,820	--	7,141	2,741	37,842	63,657	529,487
1983	32,030	390,381	4,120	62,081	47,060	50,025	604	6,981	1,765	33,471	85,580	542,938
1984	19,936	472,223	3,821	61,098	55,977	73,631	--	8,856	4,762	35,683	84,496	651,490
1985	23,527	399,657	2,985	54,284	88,611	60,507	--	9,190	856	41,593	115,979	565,231
1986	31,039	470,274	0	39,589	58,100	92,858	--	7,666	2,130	44,948	91,269	655,335
1987	41,514	473,083	207	38,783	65,943	75,854	--	6,801	1,634	29,618	109,298	622,139

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(1) Figures not available by P.A.D. district prior to 1959.
(2) Figures include receipts from Puerto Rico and Virgin Islands.
(3) Includes plant condensate.

Source: U.S. Department of Interior, 1959-1972, Minerals Yearbook
Department of Energy, 1973-1980, Annual Petroleum Statements.
1981-1987, Petroleum Supply Annual.

Section IX
Table 8

TOTAL U.S. PETROLEUM IMPORTS BY SOURE
(Thousands of Barrels Per Day)

	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
WESTERN HEMISPHERE													
Bahamas	--	--	--	--	--	--	--	--	--	--	--	1	--
Canada	158	87	98	122	204	250	265	303	322	384	450	507	608
Colombia	23	26	36	40	28	25	25	30	51	50	48	52	69
Ecuador	--	--	--	--	--	--	--	--	--	--	--	--	--
Mexico	38	32	35	17	39	49	48	46	48	45	49	45	41
Neth. Antilles	273	338	324	300	264	297	312	333	361	332	361	392	450
Puerto Rico	5	27	38	36	43	41	44	47	47	60	59	66	72
Trinidad	9	35	33	50	105	82	112	115	132	153	166	189	215
Venezuela	754	711	784	832	800	907	899	931	995	1,021	935	888	876
Virgin Islands	--	--	--	--	--	--	--	--	--	--	36	78	116
Other	5	11	8	2	10	9	21	10	11	21	41	46	34
Total	1,265	1,267	1,356	1,399	1,493	1,660	1,726	1,815	1,967	2,066	2,145	2,264	2,481
EASTERN HEMISPHERE													
Abu Dhabi/United Arab Emirates(1)	--	--	--	--	--	--	--	3	14	13	5	16	14
Algeria	--	--	--	--	--	--	--	--	--	--	--	--	--
Indonesia	65	58	55	73	62	67	59	63	61	50	62	73	89
Italy	--	8	4	1	--	--	--	1	2	18	28	49	75
Iran	18	15	25	36	60	49	62	66	79	89	71	68	46
Iraq	--	--	--	--	--	--	--	--	--	--	--	--	--
Kuwait	141	197	189	146	130	120	89	69	60	31	23	48	39
Libya	--	--	--	--	--	19	19	39	41	69	42	114	135
Malaysia	--	--	--	--	--	--	--	--	--	--	--	--	--
Netherlands	--	--	--	--	--	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--	15	11	5	8	49
Norway	--	--	--	--	--	--	--	--	--	--	--	--	--
Oman	--	--	--	--	--	--	--	--	--	--	--	--	--
Qatar	--	--	--	--	--	--	--	--	--	--	--	--	--
Saudi Arabia	60	74	68	79	69	73	86	109	144	135	86	60	42
United Kingdom	--	--	--	--	--	--	--	--	--	--	--	--	--
Other	25	81	83	81	103	94	82	93	85	91	70	140	196
Total	309	433	424	416	424	422	397	443	501	507	392	576	685
TOTAL U.S. IMPORTS	1,574	1,700	1,780	1,815	1,917	2,082	2,123	2,258	2,468	2,573	2,537	2,840	3,166

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(1) Figures from 1957 to 1971 reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai, and Sharjah which formed the United Arab Emirates.

Source: U.S. Bureau of Mines

Section IX
Table 8a

TOTAL U.S. PETROLEUM IMPORTS BY SOURCE
(Thousands of Barrels Per Day)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
WESTERN HEMISPHERE													
Bahamas	32	150	174	174	164	152	116	167	160	147	76	74	65
Canada	767	857	1,108	1,325	1,070	846	599	516	467	538	455	447	482
Colombia	45	27	16	9	5	9	21	17	20	18	4	--	--
Ecuador	--	--	--	48	42	57	51	55	54	42	27	48	42
Mexico	42	27	21	16	8	71	87	179	318	439	533	522	685
Neth. Antilles	442	429	424	585	511	332	275	214	229	231	225	197	175
Puerto Rico	87	95	102	99	90	90	88	105	94	92	88	62	50
Trinidad	217	182	226	255	251	242	273	286	253	190	176	133	112
Venezuela	983	1,019	960	1,135	979	702	699	687	646	690	481	406	412
Virgin Islands	189	273	303	329	391	406	422	466	428	431	388	327	316
Other	52	18	61	28	21	44	44	16	33	50	59	79	84
Total	2,856	3,077	3,395	4,033	3,532	2,951	2,675	2,708	2,701	2,868	2,512	2,216	2,423
EASTERN HEMISPHERE													
AbuDhabi/United Arab Emirates(1)	63	80	73	71	74	117	254	333	385	281	172	81	92
Algeria	8	15	92	135	190	282	432	552	649	636	488	311	170
Indonesia	70	111	164	213	300	389	539	533	573	420	348	366	248
Italy	83	79	83	125	74	27	37	51	38	30	4	--	--
Iran	38	112	142	223	469	280	298	530	555	304	9	--	35
Iraq	--	11	4	4	--	3	26	76	62	88	28	--	3
Kuwait	36	36	45	47	5	16	5	48	6	8	27	--	5
Libya	47	57	123	164	4	232	453	715	654	658	554	319	26
Malaysia	N.A.	N.A.	1	12	12	8	18	63	42	66	70	36	20
Netherlands	N.A.	N.A.	12	53	43	18	8	31	5	23	2	30	35
Nigeria	50	103	251	459	713	762	1,025	1,135	919	1,080	857	620	514
Norway	N.A.	N.A.	2	1	1	17	36	50	104	75	144	119	102
Oman	N.A.	N.A.	N.A.	N.A.	1	2	30	79	68	44	25	24	22
Qatar	--	--	3	7	17	18	24	67	64	31	22	7	7
Saudi Arabia	42	127	190	486	461	715	1,230	1,377	1,144	1,356	1,261	1,129	552
United Kingdom	N.A.	N.A.	10	9	8	11	31	124	180	202	176	375	456
Other	134	143	152	244	207	208	174	272	324	286	209	363	403
Total	563	848	1,347	2,253	2,579	3,105	4,620	6,036	5,662	5,588	4,396	3,780	2,690
TOTAL U.S IMPORTS	3,419	3,925	4,742	6,256	6,111	6,056	7,295	8,744	8,363	8,456	6,908	5,996	5,113

N.A. Not available on individual country basis, included in "Other."
(1) Figures from 1957 to 1971 reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai, and SHARJAH which formed the United Arab Emirates.

Source: U.S. Energy Information Administration, "Supply, Demand, and Stocks by P.A.D. Districts", Annual Reports.
U.S. Energy Information Administration, 1981-1982 -- Petroleum Supply Annual.

TOTAL U.S. PETROLEUM IMPORTS BY SOURCE
(Thousands of Barrels Per Day)

	1983	1984	1985	1986	1987
WESTERN HEMISPHERE					
Bahamas	125	88	40	37	37
Canada	547	630	770	807	848
Colombia	--	--	--	87	148
Ecuador	61	55	67	77	29
Mexico	826	748	616	699	655
Neth. Antilles	189	188	40	25	29
Puerto Rico	40	42	28	21	21
Trinidad	96	94	113	125	106
Venezuela	422	548	605	793	804
Virgin Islands	282	294	247	244	272
Other	114	110	143	152	127
Total	2,702	2,797	2,869	3,067	3,076
EASTERN HEMISPHERE					
Abu Dhabi/United Arab Emirates	30	117	45	44	61
Algeria	240	323	187	271	295
Indonesia	338	343	314	318	285
Italy	--	--	--	76	54
Iran	48	10	27	19	98
Iraq	10	12	46	81	83
Kuwait	14	36	21	68	84
Libya	--	1	4	--	--
Malaysia	4	1	3	12	13
Netherlands	65	65	58	54	60
Nigeria	302	216	293	440	535
Norway	66	114	32	60	80
Oman	34	14	5	9	36
Qatar	--	5	--	13	--
Saudi Arabia	337	325	168	685	751
United Kingdom	382	402	310	350	352
Other	479	656	685	657	815
Total	2,349	2,640	2,198	3,157	3,602
TOTAL U.S. IMPORTS	5,051	5,437	5,067	6,224	6,678

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 9

U.S. DIRECT PETROLEUM IMPORTS FROM MEMBERS OF THE ORGANIZATION OF ARAB PETROLEUM EXPORTING COUNTRIES
SEPTEMBER 1973 - APRIL 1974
(Thousands of Barrels)

	SEPTEMBER 1973			OCTOBER 1973			NOVEMBER 1973			DECEMBER 1973		
OAPEC MEMBERS	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total
1. Algeria	3,715	924	4,639	3,690	877	4,567	891	974	1,865	28	312	340
2. Bahrain	--	38	38	--	589	589	--	552	552	--	99	99
3. Egypt	--	--	--	--	--	--	--	--	--	--	--	--
4. Iraq	515	--	515	364	--	364	--	--	--	--	--	--
5. Kuwait	1,334	--	1,334	1,724	--	1,724	--	--	--	--	--	--
6. Libya	4,603	1,212	5,815	5,095	1,213	6,308	3,748	407	4,155	579	174	753
7. Qatar	1,222	--	1,222	543	--	543	273	--	273	74	--	74
8. Saudi Arabia	17,967	652	18,619	23,075	1,371	24,446	18,493	705	19,198	5,663	196	5,859
9. Syria	--	--	--	--	--	--	--	--	--	--	--	--
10. United Arab Emirates	2,652	--	2,652	1,920	3	1,923	3,197	--	3,197	--	1	1
OAPEC TOTAL	32,008	2,826	34,834	36,411	4,053	40,464	26,602	2,638	29,240	6,344	782	7,126
U.S. TOTAL	104,117	88,227	192,341	115,905	89,706	205,611	103,570	104,100	207,670	89,633	98,096	187,729
OAPEC AS A % OF U.S. TOTAL	30.7%	3.2%	18.1%	31.4%	4.5%	19.7%	25.7%	2.5%	14.1%	7.1%	0.8%	3.8%

	JANUARY 1974			FEBRUARY 1974			MARCH 1974			APRIL 1974		
OAPEC MEMBERS	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total
1. Algeria	--	--	--	75	--	75	244	--	244	3,448	141	3,589
2. Bahrain	--	--	--	--	3	3	--	--	--	--	--	--
3. Egypt	--	--	--	--	--	--	--	--	--	543	--	543
4. Iraq	--	--	--	--	--	--	--	--	--	--	--	--
5. Kuwait	--	--	--	--	--	--	--	--	--	62	--	62
6. Libya	29	--	29	468	--	468	142	--	142	244	--	244
7. Qatar	--	--	--	--	--	--	--	--	--	--	--	--
8. Saudi Arabia	593	66	659	1,073	30	1,103	2,364	289	2,653	1,234	736	1,970
9. Syria	--	--	--	--	--	--	--	--	--	--	--	--
10. United Arab Emirates	304	--	304	--	--	--	--	--	--	405	--	405
OAPEC TOTAL	926	66	992	1,616	33	1,649	2,750	289	3,039	5,936	877	6,813
U.S. TOTAL	73,839	92,158	165,997	62,940	83,246	146,186	76,329	85,328	161,657	98,011	81,094	179,105
OAPEC AS A % OF U.S. TOTAL	1.3%	0.1%	0.6%	2.6%	*	1.1%	3.6%	0.3%	1.9%	6.1%	1.1%	3.8%

* Less than one-tenth of one percent
(1) Less than 1/2 unit

Source: U.S. Bureau of Mines and U.S. Bureau of Census

Section IX
Table 10

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1972

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	70	65	--	10	40	5	5	--	225
Canada	1,085	--	--	--	--	--	--	--	--	--	1,085
Caribbean	2,270	520	160	545	5	10	10	--	--	100	3,620
Other Western Hemisphere	45	--	25	--	--	--	30	--	--	--	1,000
Western Europe	160	15	--	--	40	--	--	--	20	90	325
Middle East	475	250	1,115	8,570	460	1,265	3,770	260	605	180	16,950
North Africa	230	30	250	2,730	10	--	5	--	220	--	3,475
West Africa	265	70	290	1,170	--	--	70	--	30	20	1,915
South East Asia	180	--	10	5	10	--	830	55	--	--	1,090
USSR, Eastern Europe	20	--	130	970	75	--	25	--	40	--	1,260
Other Eastern Hemisphere	10	--	--	5	--	30	5	--	--	--	50
TOTAL IMPORTS	4,740	915	2,050	14,060	600	1,315	4,785	320	920	390	30,095

1973

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	55	85	5	25	30	--	--	--	230
Canada	1,335	--	--	--	--	--	--	--	--	--	1,335
Caribbean	2,540	500	130	355	5	5	10	--	--	85	3,630
Other Western Hemisphere	80	--	100	--	--	--	--	--	--	20	200
Western Europe	265	--	--	--	60	--	--	--	10	70	405
Middle East	820	320	1,000	10,350	535	1,315	4,385	290	775	180	19,970
North Africa	360	40	175	2,545	5	--	20	--	265	10	3,420
West Africa	515	90	415	1,030	--	--	110	--	5	--	2,165
South East Asia	240	--	--	10	--	--	1,115	40	--	--	1,405
USSR, Eastern Europe	35	--	145	935	75	5	55	--	20	15	1,285
Other Eastern Hemisphere	15	--	--	--	--	25	35	--	5	5	85
TOTAL IMPORTS	6,205	980	2,020	15,310	685	1,375	5,760	330	1,080	385	34,130

*Includes quantities in transit, transit losses, minor movements not otherwise shown, military uses, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10b

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1976

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	10	70	80	10	5	30	5	10	--	220
Canada	595	--	--	5	--	--	--	--	--	--	600
Latin America	2,010	320	140	335	10	--	10	5	30	450	3,310
Western Europe	160	--	--	--	100	--	--	--	85	--	345
Middle East	1,910	385	1,725	9,405	490	1,630	3,955	255	710	390	20,855
North Africa	915	20	160	1,680	15	10	45	--	225	--	3,070
West Africa	1,085	30	230	860	--	--	25	--	--	--	2,230
East and South Africa	--	--	--	--	--	30	--	--	--	--	30
South East Asia	585	--	15	5	--	--	1,080	80	--	--	1,765
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	10	--	--	--	--	5	40	--	--	--	55
USSR, E. Europe & China	20	--	160	1,355	20	100	135	--	25	--	1,815
TOTAL IMPORTS	7,290	765	2,500	13,725	645	1,785	5,320	345	1,085	840	34,300

1977

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	25	105	75	5	--	30	5	5	--	250
Canada	540	--	--	--	--	--	--	--	--	--	540
Latin America	2,205	290	110	290	45	--	10	--	65	100	3,115
Western Europe	250	--	10	--	130	5	--	5	80	--	480
Middle East	2,560	395	1,570	8,855	485	1,600	4,095	240	805	125	20,730
North Africa	1,320	--	150	1,735	5	--	25	--	60	--	3,295
West Africa	1,220	--	275	845	--	--	--	--	30	--	2,370
East and South Africa	--	--	--	--	--	20	--	--	--	--	20
South Asia	--	--	--	--	--	--	--	--	--	--	--
South East Asia	590	--	--	20	5	--	1,155	90	5	50	1,915
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	10	--	--	--	--	5	45	--	--	--	60
USSR, E. Europe & China	15	--	180	1,475	5	120	150	--	30	--	1,975
TOTAL IMPORTS	8,710	710	2,400	13,295	680	1,755	5,510	340	1,080	275	34,755

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10c

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1978

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	90	90	85	10	5	30	5	50	--	365
Canada	445	--	--	--	--	--	--	--	--	--	445
Latin America	2,225	290	360	345	25	--	15	--	40	100	3,400
Western Europe	375	--	--	--	135	--	--	--	40	--	550
Middle East	2,300	275	1,525	8,685	425	1,610	4,010	250	515	135	19,730
North Africa	1,310	--	200	1,770	15	--	10	--	65	--	3,370
West Africa	975	--	300	780	60	--	--	--	--	--	2,115
East and South Africa	--	--	--	5	--	5	--	--	--	--	10
South Asia	--	--	--	5	--	--	--	--	--	--	5
South East Asia	570	--	--	20	15	--	1,085	100	--	--	1,790
Japan	5	--	--	--	--	10	--	--	--	--	15
Australasia	10	--	--	--	--	10	35	--	--	--	55
USSR, E. Europe & China	10	--	200	1,395	25	200	150	--	30	--	2,010
TOTAL IMPORTS	8,225	655	2,675	13,099	710	1,840	5,335	355	740	235	33,860

1979

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	100	225	105	--	15	35	5	--	--	485
Canada	455	--	--	--	--	--	--	--	--	--	455
Latin America	2,410	230	210	270	25	--	10	--	135	355	3,645
Western Europe	350	--	--	--	145	--	--	--	25	--	520
Middle East	2,115	260	1,535	8,685	440	1,745	4,155	285	910	305	20,435
North Africa	1,355	20	120	1,870	20	--	15	--	25	--	3,425
West Africa	1,185	--	390	1,010	60	--	--	--	--	--	2,645
East and South Africa	--	--	--	--	--	10	--	--	--	--	10
South Asia	--	--	--	--	--	10	10	--	20	--	40
South East Asia	530	--	25	25	10	--	1,215	90	20	--	1,915
Japan	--	--	--	--	--	10	--	--	--	--	10
Australasia	10	--	--	--	--	--	15	--	--	--	25
USSR, E. Europe & China	--	--	200	1,115	35	180	150	--	60	--	1,740
TOTAL IMPORTS	8,410	610	2,705	13,080	735	1,970	5,605	380	1,195	660	35,350

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10d

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1980

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	105	290	145	5	10	--	--	--	--	555
Canada	370	--	--	30	--	10	10	--	--	25	445
Latin America	2,050	215	275	625	50	--	80	5	235	350	3,885
Western Europe	355	5	--	--	85	5	--	--	10	--	460
Middle East	1,555	300	1,615	7,275	445	1,745	3,560	220	695	100	17,510
North Africa	1,015	5	135	1,440	15	--	55	--	155	--	2,820
West Africa	985	5	420	990	60	--	15	--	--	--	2,475
East and South Africa	--	--	--	--	--	10	--	--	--	--	10
South Asia	--	--	--	--	--	--	5	--	35	--	40
South East Asia	405	--	--	15	25	--	1,075	140	45	--	1,705
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	--	--	--	5	--	10	5	--	--	--	20
USSR, E. Europe & China	--	--	205	1,300	--	225	180	--	95	--	2,005
TOTAL IMPORTS	6,735	635	2,940	11,825	685	2,020	4,985	365	1,270	475	31,935

1981

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	95	260	135	5	40	40	10	10	10	605
Canada	425	--	5	15	5	--	--	--	--	5	455
Latin America	1,950	295	220	880	105	--	155	25	380	370	4,380
Western Europe	525	5	--	--	105	10	5	--	110	--	760
Middle East	1,255	195	1,395	5,750	385	1,755	3,020	180	555	115	14,605
North Africa	655	30	70	1,350	--	--	70	--	--	--	2,175
West Africa	720	5	285	660	40	--	20	--	--	--	1,730
East and South Africa	--	--	--	--	10	5	5	--	--	--	20
South Asia	--	--	--	--	--	5	5	5	30	--	45
South East Asia	395	--	--	50	20	--	950	95	150	--	1,660
Japan	--	--	--	--	--	5	--	5	--	--	10
Australasia	5	--	--	--	--	10	--	--	--	--	15
USSR, E. Europe & China	20	--	185	1,405	--	240	190	--	155	--	2,195
TOTAL IMPORTS	5,950	625	2,420	10,245	675	2,070	4,460	320	1,390	500	28,655

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1982

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	90	315	225	10	65	75	10	10	15	815
Canada	470	--	--	10	--	--	5	--	--	--	485
Latin America	2,050	180	415	750	100	10	150	--	150	330	4,135
Western Europe	580	25	30	--	155	10	--	5	160	--	965
Middle East	770	95	920	4,625	275	1,640	2,755	155	425	--	11,660
North Africa	245	15	125	1,500	20	--	45	--	190	5	2,145
West Africa	605	5	105	700	45	--	--	--	40	--	1,500
East and South Africa	--	--	--	--	20	5	--	--	--	--	25
South Asia	--	--	--	45	--	5	5	5	10	--	70
South East Asia	275	--	--	25	20	--	890	135	135	--	1,480
Japan	--	--	--	5	--	5	--	5	--	--	15
Australasia	5	--	--	--	--	--	20	--	--	--	25
USSR, E. Europe & China	40	--	200	1,465	--	240	210	5	85	--	2,245
TOTAL IMPORTS	5,040	410	2,110	9,350	645	1,980	4,155	320	1,205	350	25,565

1983

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	80	255	185	15	80	105	15	5	--	740
Canada	540	--	--	--	--	--	5	--	--	--	545
Latin America	2,160	125	425	820	65	5	180	5	160	120	4,065
Western Europe	550	15	25	--	145	5	--	5	105	10	860
Middle East	575	60	855	3,415	405	1,615	2,750	120	545	15	10,355
North Africa	280	25	60	1,675	5	--	40	--	95	--	2,180
West Africa	475	15	115	755	25	--	5	--	35	--	1,425
East and South Africa	--	--	--	--	--	5	--	--	--	--	5
South Asia	--	--	--	5	10	25	15	10	--	--	65
South East Asia	345	--	--	25	20	--	780	85	55	90	1,400
Japan	--	--	--	--	--	10	--	--	--	--	10
Australasia	5	--	--	--	--	10	30	--	5	--	50
USSR, E. Europe & China	60	--	220	1,785	--	240	235	5	110	--	2,655
TOTAL IMPORTS	4,990	320	1,955	8,665	690	1,995	4,145	245	1,115	235	24,355

* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

SOURCE: BP Statistical Review of World Energy

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1984

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	85	255	205	10	60	90	10	5	--	720
Canada	625	--	--	--	--	--	5	--	--	25	655
Latin America	2,255	125	420	875	65	--	185	--	120	55	4,100
Western Europe	620	25	40	--	80	--	--	5	75	15	860
Middle East	615	70	700	3,045	340	1,555	2,830	110	525	55	9,845
North Africa	315	30	80	1,650	35	--	25	--	155	--	2,290
West Africa	445	5	105	965	55	--	--	--	40	55	1,670
East & South Africa	--	--	--	--	5	--	--	--	--	10	15
South Asia	--	--	--	20	5	10	15	--	--	5	55
South East Asia	375	--	--	35	10	--	880	105	65	130	1,600
Japan	--	--	--	--	--	10	--	--	--	5	15
Australasia	40	--	--	--	--	15	10	--	--	--	60
USSR, E. Europe & China	90	00	200	1,800	--	385	270	--	120	--	2,865
TOTAL IMPORTS	5,380	340	1,800	8,595	605	2,035	4,305	230	1,105	355	24,750

1985

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	70	285	165	10	65	105	5	5	60	770
Canada	750	--	--	5	--	--	--	--	--	--	755
Latin America	2,005	120	320	805	55	70	145	--	45	--	3,565
Western Europe	470	70	15	--	65	5	5	--	95	85	805
Middle East	425	50	635	3,020	350	1,390	2,715	65	690	--	9,340
North Africa	205	35	100	1,725	20	--	55	--	275	--	2,415
West Africa	505	10	170	965	80	10	--	--	25	--	1,765
East and South Africa	--	--	--	--	15	--	--	--	--	--	15
South Asia	--	--	--	20	--	5	10	--	--	10	45
South East Asia	410	--	--	50	30	--	815	100	80	75	1,555
Japan	--	--	--	--	--	15	--	--	--	--	15
Australasia	40	--	--	--	--	40	65	--	--	--	145
USSR, E.Europe & China	100	--	295	1,610	5	465	280	--	1,610	50	4,415
TOTAL IMPORTS	4,910	355	1,820	8,365	630	2,065	4,195	170	2,825	280	25,605

* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source: BP Statistical Review of World Energy

Section IX
Table 10g

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1986

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	85	240	205	5	75	35	10	30	80	765
Canada	670	--	--	5	--	--	--	--	--	--	675
Latin America	2,205	75	160	630	55	80	210	--	70	115	3,600
Western Europe	615	130	25	--	110	--	15	--	90	105	1,090
Middle East	915	95	570	3,520	335	1,430	2,715	100	930	270	10,880
North Africa	275	--	--	1,830	15	--	30	--	365	--	2,515
West Africa	640	45	150	1,060	80	--	--	--	5	--	1,980
East and South Africa	--	--	--	5	--	--	--	--	--	--	5
South Asia	20	--	--	15	--	--	15	10	--	--	60
South East Asia	525	--	--	5	5	--	795	70	110	40	1,550
Japan	--	--	--	--	--	10	--	--	10	--	20
Australasia	30	--	--	--	--	30	45	--	--	--	105
USSR, E.Europe & China	150	--	475	1,585	--	350	280	--	1,570	35	4,445
TOTAL IMPORTS	6,045	430	1,620	8,860	605	1,975	4,140	190	3,180	645	27,690

1987

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	85	95	180	5	70	30	5	10	55	745
Canada	610	--	--	5	--	--	15	--	--	--	630
Latin America	2,170	50	--	245	--	20	190	5	--	355	3,035
Western Europe	585	150	25	--	120	5	--	5	50	115	1,055
Middle East	1,120	35	255	3,375	330	1,555	2,710	110	825	--	10,315
North Africa	340	--	10	1,605	--	35	40	--	405	--	2,435
West Africa	855	25	60	835	60	5	5	--	35	--	1,880
East and South Africa	--	--	--	5	--	--	--	--	--	--	5
South Asia	25	--	--	5	--	5	15	5	--	--	55
South East Asia	330	--	10	5	--	--	825	80	50	55	1,355
Japan	5	--	--	--	--	20	--	--	5	--	30
Australasia	55	--	--	--	--	50	35	--	--	--	140
USSR, E. Europe and China	150	--	345	1,645	30	255	260	--	1,690	105	4,480
TOTAL IMPORTS	6,245	345	1,000	7,905	545	2,020	4,125	220	3,070	685	26,160

** Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source: BP Statistical Review of World Energy.

Section IX
Table 11

HISTORICAL U.S. IMPORTS OF CRUDE OIL AND REFINED PRODUCTS: 1918-1946

	Crude Oil		Refined Products	
	Thous. of Bbls	Thous. of B/D	Thous. of Bbls	Thous. of B/D
1918	5,884	16	62,128	170
1919	6,348	17	57,500	158
1920	9,295	25	70,281	192
1921	9,627	26	62,215	170
1922	10,805	30	63,759	175
1923	17,534	48	84,713	232
1924	18,239	50	99,291	271
1925	13,337	37	100,841	276
1926	15,407	42	116,881	320
1927	15,844	43	126,159	346
1928	18,966	52	136,374	373
1929	26,401	72	137,133	376
1930	23,705	65	133,164	365
1931	25,535	70	99,146	272
1932	27,393	75	76,134	208
1933	36,584	100	70,430	193
1934	41,127	113	73,707	202
1935	51,430	141	77,925	213
1936	50,313	137	82,056	224
1937	67,234	184	106,077	291
1938	77,254	212	116,891	320
1939	72,076	197	117,473	322
1940	51,496	141	78,970	216
1941	33,238	91	75,592	207
1942	33,834	93	83,073	228
1943	41,342	113	108,615	298
1944	34,238	94	173,378	474
1945	32,998	90	149,985	411
1946	42,436	116	110,687	303

Source: Department of Interior, Bureau of Mines, Minerals Industry Surveys and "Annual Petroleum Statements".

SECTION X. EXPORTS

Table 1. Total U.S. Domestic Production and Exports of Petroleum
Table 2. U.S. Exports of Petroleum to Selected Areas
Table 3. African Oil Exports to Selected Areas
Table 4. Middle East Oil Exports to Selected Areas
Table 5. The Role of Middle East and African Oil in Western European and Japanese Consumption
Table 6. The Role of Middle East and African Oil in World Exports

Section X
Table 1

TOTAL U.S. DOMESTIC PRODUCTION AND EXPORTS OF CRUDE OIL AND ITS PRODUCTS
(Thousands of barrels)

Year	Production(1)	Exports	Exports As a % of U.S. Production
1947	1,989,850	164,477	8.3
1948	2,167,264	134,674	6.2
1949	1,999,215	119,376	6.0
1950	2,155,693	111,306	5.2
1951	2,452,465	154,052	6.3
1952	2,513,351	158,188	6.3
1953	2,596,661	146,591	5.6
1954	2,567,121	129,733	5.1
1955	2,765,799	134,188	4.9
1956	2,910,010	157,386	5.4
1957	2,911,891	207,187	7.1
1958	2,743,736	100,638	3.7
1959	2,895,347	77,067	2.7
1960	2,915,090	73,906	2.5
1961	2,983,447	63,563	2.1
1962	3,048,894	61,390	2.0
1963	3,153,609	75,914	2.4
1964	3,209,293	73,879	2.3
1965	3,290,070	68,288	2.1
1966	3,496,398	72,400	2.1
1967	3,730,198	112,060	3.0
1968	3,879,353	84,544	2.2
1969	3,951,992	84,885	2.1
1970	4,123,366	94,458	2.3
1971	4,071,729	81,685	2.0
1972	4,093,584	81,389	2.0
1973	3,995,326	84,413	2.1
1974	3,818,683	80,491	2.1
1975	3,652,737	76,428	2.1
1976	3,563,225	81,599	2.3
1977	3,599,720	88,588	2.5
1978	3,750,302	132,057	3.5
1979	3,699,333	171,856	4.6
1980	3,722,152	199,256	5.4
1981	3,715,743	217,024	5.8
1982	3,722,591	297,514	8.0
1983	3,730,085	269,890	7.2
1984	3,846,173	264,077	6.9

(1) Figures include crude oil, lease condensate and natural gas liquids.

Source: U.S. Energy Information Administration, Annual Petroleum Statements
1981-1984 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. DOMESTIC PRODUCTION AND EXPORTS OF CRUDE OIL AND ITS PRODUCTS
(Thousands of barrels)

Year	Production(1)	Exports	Exports As a % of U.S. Production
1985	3,861,911	285,069	7.4
1986	3,734,252	286,373	7.7
1987	3,629,669	278,731	7.7

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(1) Figures include crude oil, lease condensate and natural gas liquids.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section X
Table 2

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	CANADA		MEXICO		CARIBBEAN(1)		OTHER LATIN AMERICAN		UNITED KINGDOM		OTHER EUROPEAN	
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products
1947	39,058	18,266	101	4,446	1,354	5,854	1,120	3,279	299	28,565	4,424	20,674
1948	33,298	20,629	62	4,157	1,498	8,788	1,417	3,439	471	16,223	2,991	13,150
1949	29,996	15,137	43	5,037	1,763	8,496	295	4,186	424	12,410	547	12,423
1950	30,708	15,953	--	6,229	1,829	7,278	661	4,141	441	5,868	851	8,227
1951	21,172	17,867	--	7,034	2,167	9,729	1,356	3,932	457	13,914	1,048	12,284
1952	20,172	25,211	--	7,130	2,513	13,703	1,789	4,295	499	9,889	976	9,466
1953	14,025	26,939	--	8,281	2,620	10,399	1,081	3,515	418	9,201	926	7,809
1954	8,130	22,635	--	12,003	2,928	7,185	608	5,003	462	7,687	745	5,424
1955	6,501	20,329	--	16,062	3,136	7,713	236	6,426	532	8,875	650	[illegible],385
1956	5,570	20,560	--	16,485	3,262	9,979	--	5,007	5,238	10,831	13,377	14,560
1957	8,240	18,307	902	15,950	3,283	11,120	--	7,110	14,880	19,660	21,003	29,660
1958	1,153	13,497	696	11,568	592	7,977	--	3,661	378	6,010	450	9,420
1959	--	16,061	21	8,297	--	3,978	--	4,753	405	6,592	550	9,515
1960	--	12,622	--	6,428	--	3,315	--	4,131	433	3,840	568	10,395
1961	20	8,381	133	4,415	--	3,721	1	3,143	437	3,268	355	9,401
1962	8	7,706	--	4,981	--	2,888	--	3,417	428	2,616	--	10,290
1963	2	7,985	3	6,889	--	3,481	--	3,036	424	3,443	1	19,933
1964	7	9,791	3	8,920	--	4,503	--	3,656	336	3,191	--	14,387
1965	12	9,619	333	9,452	--	3,322	1	2,635	352	3,924	--	13,365
1966	2	11,715	203	13,955	--	2,179	--	3,240	431	3,784	1	13,522
1967	3,688	14,521	18	12,999	645	3,479	--	4,444	16,959	5,562	4,604	15,318
1968	5	14,126	114	11,140	283	1,603	--	5,138	352	4,838	--	14,912
1969	30	16,017	1	12,098	220	2,511	--	5,829	430	4,421	--	17,005
1970	328	10,855	--	12,142	4,264	3,272	--	4,565	176	4,185	--	20,250
1971	60	9,384	--	15,180	181	4,474	--	5,484	120	3,053	--	19,406
1972	--	9,599	--	15,061	--	3,888	--	4,374	--	3,705	--	24,033
1973	--	11,427	--	15,984	--	3,614	--	4,294	--	3,249	177	24,863
1974	108	11,504	--	12,885	966	3,023	--	4,005	--	2,317	--	24,238

N.A. Not Available
(1) As of 1971, includes exports to Puerto Rico and Virgin Islands.

Source: U.S. Bureau of Mines: 1947-1974, Minerals Yearbook.

Section X
Table 2a

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	MIDDLE EAST		JAPAN		OTHER ASIAN		AFRICA		TOTAL
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	U.S. EXPORTS
1947	N.A.		--	--	--	14,565	--	2,786	164,477
1948	N.A.		--	--	--	8,570	--	2,400	134,674
1949	N.A.		--	364	--	7,176	--	2,922	119,376
1950	N.A.		334	92	--	2,953	--	1,916	111,306
1951	N.A.		2,403	4,878	--	11,406	--	4,783	154,052
1952	N.A.		748	7,286	--	13,126	--	5,896	158,188
1953	N.A.		862	10,508	--	8,740	--	5,043	146,591
1954	N.A.		726	8,166	--	5,996	--	2,734	129,733
1955	N.A.		515	11,282	--	4,363	--	1,636	134,188
1956	N.A.		1,055	9,790	--	4,309	122	2,154	157,386
1957	N.A.		1,057	13,642	339	6,431	539	3,328	207,187
1958	N.A.		1,076	12,486	--	4,491	--	2,368	100,638
1959	N.A.		1,548	16,153	--	5,819	--	2,383	77,067
1960	N.A.		2,086	20,595	-	5,891	--	2,332	73,906
1961	N.A.		2,218	19,255	55	5,930	--	1,686	63,563
1962	N.A.		1,354	18,333	--	6,544	--	2,655	61,390
1963	N.A.		1,266	20,080	1	7,316	--	3,066	75,914
1964	N.A.		952	19,429	63	6,602	--	2,206	73,879
1965	N.A.		306	14,466	--	7,648	--	1,596	68,288
1966	N.A.		808	12,283	31	7,077	1	2,019	72,400
1967	N.A.		626	17,938	--	7,299	1	2,179	112,060
1968	N.A.		1,048	19,566	--	7,779	--	2,026	84,545
1969	N.A.		755	16,314	--	7,364	--	1,849	84,885
1970	N.A.		223	24,868	--	6,433	--	1,475	94,458
1971	--	1,028	139	13,941	1	7,697	2	1,695	81,845
1972	--	1,158	187	11,475	--	6,165	--	1,744	81,389
1973	--	957	520	11,782	--	5,888	--	1,658	84,413
1974	--	1,146	--	13,809	--	4,728	--	1,762	80,491

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(2) Total includes a quantity of refined products exported to an undesignated area whose destination is undisclosed for security reasons: 1950-5,612, 1951-16,384, 1952-18,653, 1953-18,206, 1954-21,941, 1955-20,239, 1956-18,715, 1957-15,221, 1958-12,419.

Source: U.S. Bureau of Mines: 1947-74, Minerals Yearbook

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	CANADA		MEXICO		CARIBBEAN(1)		OTHER LATIN AMERICAN		UNITED KINGDOM		OTHER EUROPEAN	
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products
1975	19	8,139	--	15,425	2,127	3,114	--	3,386	--	2,636	--	24,846
1976	2,241	8,096	--	12,677	700	8,772	--	3,474	--	2,732	--	27,220
1977	16,460	9,548	--	8,893	1,795	3,566	--	3,338	--	3,136	--	25,933
1978	28,761	10,640	--	9,877	28,967	3,373	--	4,459	--	2,447	--	26,457
1979	26,079	10,299	--	7,835	59,628	3,538	--	4,718	--	2,493	--	37,497
1980	30,567	8,822	--	10,085	74,367	9,942	--	4,006	--	2,386	--	34,885
1981	16,440	16,102	--	9,416	65,104	18,692	--	2,781	--	1,971	--	47,710
1982	13,083	18,019	--	19,464	67,633	23,531	--	6,714	--	5,167	--	77,969
1983	6,781	21,047	--	8,812	46,431	21,026	--	6,966	--	3,047	--	66,025
1984	5,784	24,672	--	12,681	49,498	20,570	--	11,046	--	5,291	--	56,913
1985	7,523	19,463	--	22,187	55,019	20,772	--	10,174	--	5,210	--	55,580
1986	6,040	25,027	--	20,525	39,954	20,225	--	11,408	--	3,095	--	70,183
1987	5,988	24,247	--	25,544	47,864	27,966	--	6,943	7	2,359	--	56,432

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(1) Includes exports to Puerto Rico and Virgin Islands

Source: 1975-1980: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals.

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	MIDDLE EAST		JAPAN		OTHER ASIAN		AFRICA		TOTAL
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	U.S. EXPORTS
1975	--	995	--	10,012	--	3,550	--	2,179	76,428
1976	--	1,280	--	9,326	--	3,725	--	2,356	81,599
1977	--	1,034	--	8,951	--	4,213	--	1,721	88,588
1978	--	1,380	--	9,642	--	4,802	--	1,252	132,057
1979	--	1,085	--	12,543	--	4,416	--	1,725	171,856
1980	--	1,291	--	11,596	--	9,028	--	2,280	199,256(1)
1981	--	1,912	--	14,014	7	16,715	--	2,595	217,024(1)
1982	--	2,182	--	24,836	--	28,077	--	2,791	297,514(1)
1983	--	1,808	--	38,132	--	35,904	--	3,097	269,854(1)
1984	--	1,750	--	33,657	--	24,263	--	2,724	264,077(1)
1985	--	1,315	--	39,468	--	18,215	--	2,668	285,069(1)
1986	--	2,375	--	39,975	--	30,592	--	2,345	286,373(1)
1987	--	3,107	--	43,799	1,105	29,693	--	1,337	278,732(1)

(1) Includes exports to Greenland, and other. Includes exports to Puerto Rico and Virgin Islands

Source: 1975-1980: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals.

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Table 3

AFRICAN OIL EXPORTS TO SELECTED AREAS
(Thousands of barrels per day)

Year(1)	United States	Western Europe	Japan	All Others	African Exports
1960	--	237	--	--	237
1961	5	430	--	--	435
1962	25	740	--	--	765
1963	25	1,125	--	30	1,180
1964	55	1,565	--	30	1,650
1965	70	2,040	--	30	2,140
1966	90	2,540	5	130	2,765
1967	55	2,700	--	155	2,910
1968	170	3,535	5	165	3,875
1969	330	4,370	15	230	4,945
1970	125	5,330	50	300	5,805
1971	195	4,430	60	805	5,490
1972	495	3,900	75	920	5,390
1973	875	3,575	130	1,005	5,585
1974	1,025	3,215	170	760	5,170
1975	1,350	2,365	140	560	4,415
1976	2,000	2,540	70	720	5,330
1977	2,540	2,580	25	540	5,685
1978	2,285	2,555	--	655	5,495
1979	2,540	2,880	15	645	6,080
1980	2,000	2,430	70	805	5,305
1981	1,375	2,010	95	445	3,925
1982	850	2,200	45	575	3,670
1983	755	2,430	45	380	3,610
1984	760	2,615	25	575	3,975
1985	705	2,690	55	745	4,195
1986	915	2,895	30	660	4,500
1987	1,195	2,445	45	635	4,320

(1) Not available prior to 1960

Source: "BP Statistical Review of the World Energy," Annual

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Table 4

MIDDLE EAST OIL EXPORTS TO SELECTED AREAS
(Thousands of barrels per day)

Year(1)	United States	Western Europe	Japan	All Others	Middle East Exports
1959	355	2,528	--	1,060	4,120
1960	347	2,724	--	1,619	4,690
1961	345	2,855	610	1,280	5,090
1962	315	3,060	720	1,490	5,585
1963	295	3,400	920	1,540	6,155
1964	310	3,740	1,115	1,760	6,925
1965	350	4,195	1,435	1,630	7,610
1966	320	4,375	1,650	2,280	8,625
1967	200	4,605	2,035	2,305	9,145
1968	270	5,065	2,650	2,460	10,445
1969	265	5,780	3,055	2,425	11,525
1970	175	6,220	3,485	2,835	12,715
1971	390	7,685	3,810	3,365	15,250
1972	475	8,570	3,770	4,135	16,950
1973	820	10,350	4,385	4,415	19,970
1974	1,025	10,195	4,050	4,780	20,050
1975	1,140	8,815	3,675	4,875	18,505
1976	1,910	9,405	3,955	5,585	20,855
1977	2,560	8,855	4,095	5,220	20,730
1978	2,300	8,685	4,010	4,735	19,730
1979	2,115	8,685	4,155	5,480	20,435
1980	1,555	7,275	3,560	5,120	17,510
1981	1,255	5,750	3,020	4,580	14,605
1982	770	4,625	2,755	3,510	11,660
1983	575	3,415	2,750	3,615	10,355
1984	615	3,045	2,830	3,355	9,845
1985	425	3,020	2,715	3,180	9,346
1986	915	3,520	2,715	3,730	10,880
1987	1,120	3,375	2,710	3,110	10,315

(1) Not available prior to 1959.

Source: BP Statistical Review of the World Energy, Annual.

Section X
Table 5

THE ROLE OF MIDDLE EAST AND AFRICAN OIL ON WESTERN EUROPEAN AND JAPANESE CONSUMPTION
(Thousands of Barrels Per Day)

	WESTERN EUROPE			JAPAN		
Year	Consumption	From the Middle East	From Africa	Consumption	From the Middle East	From Africa
1961	4,453	2,855	430	821	510	--
1962	5,128	3,060	740	934	720	--
1963	5,893	3,400	1,125	1,212	920	--
1964	6,692	3,740	1,565	1,484	1,115	--
1965	7,525	4,195	2,040	1,743	1,435	--
1966	8,360	4,375	2,540	1,979	1,650	5
1967	8,937	4,605	2,700	2,144	2,035	--
1968	9,958	5,065	3,535	2,660	2,650	5
1969	11,378	5,780	4,370	3,250	3,055	15
1970	12,364	6,220	5,330	3,847	3,485	50
1971	12,912	7,685	4,430	4,179	3,810	60
1972	13,847	8,570	3,900	4,364	3,770	75
1973	14,492	10,350	3,575	5,071	4,385	130
1974	13,681	10,195	3,215	4,960	4,050	170
1975	12,603	8,815	2,365	4,502	3,675	140
1976	13,448	9,405	2,540	4,771	3,955	70
1977	14,235	8,855	2,580	5,345	4,095	25
1978	14,630	8,685	2,555	5,420	4,012	10
1979	15,037	8,685	2,880	5,480	4,155	15
1980	13,826	7,275	2,430	4,960	3,560	70
1981	12,775	5,750	2,010	4,695	3,020	95
1982	12,210	4,625	2,200	4,395	2,755	45
1983	11,940	3,415	2,430	4,390	2,750	45
1984	12,050	3,045	2,615	4,565	2,830	25
1985	11,865	3,020	2,690	4,380	2,715	55
1986	12,340	3,520	2,895	4,435	2,715	30
1987	12,345	3,375	2,445	4,510	2,710	45

Source: 1961-1980: Western Europe and Japanese Consumption: U.S. Department of Energy, International Petroleum Annual
1981-1986: Western Europe and Japanese Consumption: BP Statistical Review of World Energy
1961-1986: Middle East and African Exports: BP Statistical Review of World Energy
1987: BP Statistical Review of World Energy

Section X
Table 6

THE ROLE OF MIDDLE EAST AND AFRICAN OIL IN WORLD EXPORTS
(Thousands of Barrels/Day)

	MIDDLE EAST		AFRICA		TOTAL WORLD	
Year	Production	Exports	Production	Exports	Production	Exports
1961	5,633	5,090	489	435	22,428	9,870
1962	6,186	5,585	804	765	24,334	11,285
1963	6,812	6,155	1,190	1,180	26,132	12,205
1964	7,613	6,925	1,704	1,650	28,168	13,625
1965	8,367	7,610	2,224	2,140	30,308	15,110
1966	9,338	8,625	2,821	2,765	32,936	16,890
1967	10,048	9,145	3,117	2,910	35,382	17,905
1968	11,298	10,445	3,992	3,875	38,651	20,400
1969	12,447	11,525	5,069	4,945	41,706	22,640
1970	13,957	12,715	6,069	5,805	45,805	25,420
1971	16,381	15,250	5,645	5,490	48,391	27,285
1972	18,116	16,950	5,699	5,390	50,822	30,095
1973	21,219	19,970	5,922	5,585	55,803	34,130
1974	21,882	20,050	5,452	5,170	56,268	33,330
1975	19,619	18,505	5,003	4,415	53,418	30,335
1976	22,174	20,855	5,832	5,330	58,059	34,300
1977	22,600	20,730	6,236	5,685	62,620	34,755
1978	21,415	19,730	6,115	5,495	63,085	33,860
1979	21,558	20,435	6,640	6,080	62,658	35,350
1980	18,407	17,510	6,031	5,305	59,454	31,935
1981	15,752	14,605	4,581	3,925	55,837	28,655
1982	12,664	11,660	4,465	3,670	53,092	25,565
1983	11,550	10,335	4,410	3,610	52,625	24,355
1984	11,279	9,845	4,683	3,975	53,674	24,750
1985	10,305	9,340	4,855	4,195	52,931	25,605
1986	12,710	10,880	4,986	4,500	55,684	27,690
1987(1)	13,115	10,315	5,225	4,320	60,200	26,160

(1) Production figures for 1987 include crude oil, shale oil, oil sands and natural gas liquids.

Source: 1961-1978: Total World, Middle East and African Production, U.S. Department of Energy, International Petroleum Annual
1979-1986: Total World, Middle East and African Production, CIA, International Energy Statistical Review
1961-1986: Total World, Middle East and African Exports, BP Statistical Review of the World Oil Industry
1987: BP Statistical Review of World Energy

SECTION XI. OFFSHORE

Table 1. Estimated World Production of Crude Oil, Offshore vs Offshore

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Section XI
Table 1

ESTIMATED WORLDWIDE PRODUCTION OF CRUDE OIL
ONSHORE vs OFFSHORE
(Thousands of Barrels)

Year	Onshore Production	Offshore Production	Total World Production
1969	12,961,336	2,261,175	15,222,511
1970	13,961,668	2,757,040	16,718,708
1971	14,649,885	3,012,908	17,662,793
1972	15,346,357	3,254,388	18,600,745
1973	16,729,330	3,638,651	20,367,981
1974	17,140,035	3,397,692	20,537,727
1975	16,316,198	3,186,137	19,502,335
1976	17,661,041	3,530,499	21,191,540
1977	17,738,887	4,161,808	21,900,695
1978	17,961,621	4,196,630	22,158,251
1979	18,139,390	4,625,660	22,765,050
1980	16,754,248	5,009,916	21,764,164
1981	15,395,719	4,984,786	20,380,505
1982	14,436,115	4,942,465	19,378,580
1983	14,174,410	5,033,715	19,208,125
1984	14,040,492	5,604,192	19,644,684
1985	13,798,095	5,521,720	19,319,815
1986	15,402,270	4,922,390	20,324,660
		(Thousands of barrels per day)	
1969	35,511	6,195	41,706
1970	38,251	7,554	45,805
1971	40,126	8,255	48,381
1972	41,930	8,892	50,822
1973	45,835	9,968	55,803
1974	46,957	9,310	56,267
1975	44,689	8,729	53,418
1976	48,253	9,647	57,900
1977	48,600	11,402	60,002
1978	49,210	11,498	60,708
1979	49,852	12,518	62,370
1980	45,766	13,688	59,454
1981	42,180	13,657	55,837
1982	39,551	13,561	53,092
1983	38,834	13,791	52,625
1984	38,362	15,312	53,674
1985	37,803	15,128	52,931
1986	42,198	13,486	55,684

Source: Total World Production, U.S. Energy Information Administration
1980-1986 production, Central Intelligence Agency
United States Offshore Production, U.S. Department of Interior and U.S. Department of Energy
Rest of World Offshore Production, Offshore Magazine

Section XI
Table 2

ESTIMATED WORLDWIDE OFFSHORE PRODUCTION OF CRUDE OIL BY AREA
(Millions of Barrels)

Year	United States	Venezuela	Other Latin America	Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations(2)	Total World
1970	583.5	897.9	43.4	1,524.8	760.7	239.8	133.2	4.4	2,662.9	94.2	2,757.0
1971	625.7	908.9	69.4	1,604.0	913.4	233.9	158.4	12.0	2,921.7	91.3	3,012.9
1972	621.3	915.0	82.4	1,618.7	1,040.5	276.3	216.7	15.8	3,168.0	86.4	3,254.4
1973	583.4	985.5	65.8	1,634.7	1,282.2	323.2	267.5	24.7	3,552.2	86.1	3,638.4
1974	535.7	756.0	73.7	1,365.4	1,262.7	380.3	275.1	29.9	3,313.4	84.3	3,397.7
1975	496.5	634.0	97.4	1,228.0	1,070.3	364.9	323.2	116.5	3,102.9	83.2	3,186.1
1976	467.8	613.9	107.1	1,188.8	1,198.2	384.6	407.6	270.9	3,450.0	80.5	3,530.5
1977	439.2	456.3	107.7	1,003.1	1,648.0	490.2	549.7	396.0	4,087.0	74.8	4,161.8
1978	416.3	395.7	103.7	915.6	1,734.8	414.3	525.6	532.5	4,122.9	73.7	4,196.6
1979	398.6	383.3	255.1	1,037.0	1,934.1	355.5	490.6	736.6	4,553.8	71.9	4,625.7
1980	379.7	401.1	281.8	1,062.6	2,132.4	349.2	541.7	850.2	4,936.0	73.9	5,009.9
1981	385.4	381.1	503.0	1,269.5	1,936.3	308.8	539.5	858.5	4,912.5	72.3	4,984.8
1982	412.3	374.5	733.3	1,520.1	1,496.9	286.2	589.9	992.1	4,877.9	64.6	4,942.5
1983	426.9	411.7	747.9	1,586.5	1,322.0	296.0	604.4	1,128.7	4,969.8	63.9	5,033.7
1984	469.5	402.6	851.3	1,723.4	1,473.9	368.9	726.5	1,274.4	5,542.7	61.5	5,604.2
1985	456.1	347.1	857.4	1,660.6	1,432.6	360.6	725.3	1,253.4	5,461.5	60.2	5,521.7
1986	457.6	328.5	851.2	1,637.3	1,183.0	312.4	568.3	1,208.2	4,862.2	60.2	4,922.4
1987	436.7	387.6	847.5	1,671.8	1,337.4	396.8	661.4	1,235.2	5,302.6	75.6	5,378.2

(Thousands of barrels per day)

Year	United States	Venezuela	Other Latin America	Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations(2)	Total World
1970	1,599	2,460	119	4,178	2,084	657	365	12	7,296	258	7,554
1971	1,714	2,490	190	4,394	2,503	641	434	33	8,005	250	8,255
1972	1,698	2,500	225	4,423	2,843	755	592	43	8,656	236	8,892
1973	1,598	2,700	180	4,478	3,513	885	788	68	9,732	236	9,968
1974	1,468	2,071	202	3,741	3,460	1,042	754	82	9,079	231	9,310
1975	1,360	1,737	267	3,364	2,932	1,000	886	319	8,501	228	8,729
1976	1,278	1,677	293	3,248	3,542	783	1,114	740	9,427	220	9,647
1977	1,203	1,250	295	2,748	4,960	898	1,506	1,085	11,197	205	11,402
1978	1,141	1,084	284	2,509	5,195	693	1,440	1,459	11,296	202	11,498
1979	1,092	1,050	699	2,841	5,149	974	1,344	2,018	12,326	192	12,518
1980	1,037	1,096	770	2,903	5,826	954	1,480	2,323	13,486	202	13,688
1981	1,056	1,044	1,378	3,478	5,305	846	1,478	2,352	13,459	198	13,657
1982	1,130	1,026	2,009	4,165	4,101	784	1,616	2,718	13,364	177	13,541
1983	1,170	1,128	2,049	4,347	3,622	811	1,656	3,092	13,616	175	13,791
1984	1,283	1,100	2,326	4,709	4,027	1,008	1,985	3,482	15,144	168	15,312
1985	1,250	951	2,349	4,550	3,925	988	1,987	3,434	14,963	165	15,128
1986	1,264	900	2,332	4,496	3,241	856	1,557	3,310	13,321	165	13,486
1987	1,196	1,062	2,322	4,580	3,664	1,087	1,812	3,384	14,527	207	14,734

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(1) Data not available for prior years.
(2) Only the U.S.S.R. is reported having offshore production until 1978, when China began reporting.

Source: United States Production: 1970-1971, U.S. Geological Survey; 1972-1987, U.S. Energy Information Administration
Rest of World--Offshore Magazine.

Section XI
Table 3

PRODUCTION AND VALUE OF U.S. CRUDE OIL AND CONDENSATE
ONSHORE - OFFSHORE

	PRODUCTION (Thousands of Barrels)			DOLLAR VALUE AT WELLHEAD (Thousands ofDollars)		
Year	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
Cumulative to 1953	47,367,775	445,942	47,813,717	$81,119,901	$ 763,977	$ 81,883,878
1954	2,266,163	48,825	2,314,988	6,289,428	135,502	6,424,930
1955	2,423,885	60,543	2,484,428	6,702,949	167,431	6,870,380
1956	2,542,152	75,131	2,617,283	7,054,406	208,519	7,262,925
1957	2,531,581	85,320	2,616,901	7,815,875	263,384	8,079,259
1958	2,361,047	87,940	2,448,987	7,114,958	265,015	7,379,973
1959	2,471,886	102,704	2,574,590	7,175,225	298,111	7,473,336
1960	2,452,659	122,274	2,574,933	7,067,797	352,384	7,420,181
1961	2,483,272	138,486	2,621,758	7,165,968	399,614	7,565,582
1962	2,503,979	172,210	2,676,189	7,273,791	500,260	7,774,051
1963	2,554,958	197,765	2,752,723	7,393,484	572,259	7,965,743
1964	2,569,436	217,386	2,786,822	7,391,746	625,332	8,017,078
1965	2,606,936	241,578	2,848,514	7,466,393	691,905	8,158,298
1966	2,726,037	301,726	3,027,763	7,856,835	869,588	8,726,423
1967	2,847,820	367,922	3,215,742	8,303,050	1,072,677	9,375,727
1968	2,857,058	471,984	3,329,042	8,406,116	1,388,710	9,794,826
1969	2,841,469	530,282	3,371,751	8,786,876	1,639,804	10,426,680
1970	2,933,985	583,465	3,517,450	9,320,228	1,853,498	11,173,726
1971	2,828,217	625,697	3,453,914	9,574,694	2,118,304	11,692,998
1972	2,834,053	621,315	3,455,368	9,601,562	2,101,948	11,706,510
1973	2,777,538	583,365	3,360,903	10,791,444	2,266,461	13,057,905
1974	2,666,887	535,698	3,202,585	17,970,771	3,609,778	21,580,549

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(1) Total dollar value distributed in proportion to percentages of production onshore and offshore

Source: Total U.S. Production and Total Dollar Value at Wellhead, U.S. Bureau of Mines
U.S. Offshore Production, 1973-1974, U.S. Bureau of Mines; All other years, U.S. Geological Survey
Distribution of production and value computed by the American Petroleum Institute

Section XI
Table 3a

PRODUCTION AND VALUE OF U.S. CRUDE OIL AND CONDENSATE
ONSHORE - OFFSHORE

Year	PRODUCTION (Thousands of Barrels)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
1975	2,560,242	496,537	3,056,779	$19,361,086	$ 3,754,973	$23,116,059
1976	2,508,356	467,824	2,976,180	20,420,899	3,808,641	24,229,540
1977	2,546,187	439,173	2,985,360	21,996,649	3,794,073	25,790,722
1978	2,761,891	416,325	3,178,216	24,747,514	3,730,310	28,477,824
1979	2,722,715	398,595	3,121,310	34,064,477	4,986,855	39,051,332
1980	2,766,716	379,649	3,146,365	57,791,998	7,930,018	65,722,016
1981	2,743,203	385,421	3,128,624	87,151,743	12,244,641	99,396,384
1982	2,744,432	412,283	3,156,715	78,270,757	11,758,641	90,029,512
1983	2,744,080	426,919	3,170,999	71,867,673	11,180,818	83,048,491
1984	2,780,219	469,477	3,249,696	71,991,425	12,110,707	84,102,132
1985	2,818,450	456,103	3,274,553	67,868,276	10,982,960	78,851,236
1986	2,710,628	457,624	3,168,252	34,316,550	5,793,520	40,110,070
1987	2,610,699	436,679	3,047,378	40,244,801	6,715,294	46,960,095

(1) Total dollar value distributed in proportion to percentages of production onshore and offshore.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals. Distribution of production and value computed by the American Petroleum Institute.

Section XI
Table 4

ESTIMATED WORLDWIDE PRODUCTION OF NATURAL GAS
ONSHORE vs OFFSHORE
(Millions of cubic feet)

Year	Onshore Production	Offshore Production	Total World Production
1970	32,763,671	5,330,290(1)	38,093,961
1971	N.A.	N.A.	41,188,396
1972	N.A.	N.A.	43,524,559
1973	N.A.	N.A.	46,143,601
1974	N.A.	N.A.	47,178,520
1975	39,985,557	7,532,217	47,517,774
1976	37,455,724	10,849,960	48,305,684
1977	42,518,548	7,581,542	50,100,090
1978	42,210,443	9,538,859	51,749,302
1979	42,748,966	10,0092,084	52,841,050
1980	43,949,440	10,189,646	54,139,086
1981	43,326,868	10,787,132	54,115,000
1982	43,023,688	10,671,312	53,695,000
1983	45,280,283	10,488,325	55,768,608
1984	45,406,112	13,186,128	58,592,240
1985	47,799,258	13,186,128	60,383,680
1986	49,132,600	12,348,680	61,481.280

(Millions of cubic feet per day)

Year	Onshore Production	Offshore Production	Total World Production
1970	89,763	14,604	104,367
1971	N.A.	N.A.	112,845
1972	N.A.	N.A.	118,920
1973	N.A.	N.A.	126,421
1974	N.A.	N.A.	129,256
1975	109,550	20,636	130,186
1976	102,338	29,645	131,983
1977	116,490	20,771	137,261
1978	115,645	26,134	141,779
1979	117,120	27,650	144,770
1980	120,080	27,841	147,921
1981	118,706	29,554	148,260
1982	117,874	29,236	147,110
1983	124,407	28,384	152,791
1984	126,763	33,325	160,088
1985	131,322	34,113	165,435
1986	134,610	33,832	168,442

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(1) Reflects Free World offshore production since Communist Nation production figures are not available prior to 1973.

Source: Offshore Production, Offshore Magazine and U.S. Department of Interior
Total World Production, 1970-78, U.S. Energy Information Administration, World Natural Gas
1979-80, Central Intelligence Agency, International Energy Statistical Review
1981-86, British Petroleum, BP Statistical Reveiw of World Energy

Section XI
Table 5

ESTIMATED WORLDWIDE OFFSHORE PRODUCTION OF NATURAL GAS BY AREA
(Billions of cubic feet)

	WESTERN HEMISPHERE									
Year	United States	Latin America	Total	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1970	3,287.4	27.6	3,315.0	1,568.0	28.7	22.2	396.5	5,330.3	N.A.	N.A.
1971	3,590.9	26.8	3,617.7	214.3	N.A.	35.8	654.9	N.A.	N.A.	N.A.
1972	3,883.9	26.3	3,910.2	252.6	N.A.	44.6	937.1	N.A.	N.A.	N.A.
1973	3,976.5	28.3	4,004.8	263.4	N.A.	102.8	1,095.0	N.A.	244.6	N.A.
1974	4,246.5	39.9	4,286.4	259.7	N.A.	135.9	1,314.0	N.A.	264.6	N.A.
1975	4,164.7	54.0	4,218.7	1,396.1	114.6	132.1	1,388.1	7,249.7	282.5	7,532.2
1976	4,315.4	123.3	4,438.7	259.9	183.0	233.9	5,406.2	10,521.7	328.3	10,850.0
1977	4,496.9	134.7	4,631.6	334.0	79.9	464.6	1,707.8	7,218.0	363.5	7,581.5
1978	5,134.0	219.7	5,353.8	365.4	80.7	897.5	2,453.2	9,150.5	388.4	9,538.9
1979	5,444.9	201.5	5,646.4	362.1	182.5	759.9	2,717.4	9,668.3	423.8	10,092.1
1980	5,382.2	223.3	5,605.5	546.1	185.9	712.6	2,691.2	9,741.3	448.4	10,189.6
1981	5,546.5	495.3	6,041.8	259.2	123.7	793.5	3,082.8	10,301.0	486.2	10,787.1
1982	5,466.1	576.0	6,042.1	115.7	211.7	832.9	3,081.3	10,283.7	518.3	10,802.0
1983	4,734.8	583.6	5,318.4	529.3	304.4	1,190.6	3,181.3	10,524.0	540.9	11,064.9
1984	5,220.1	1,260.1	6,480.2	504.4	279.6	1,420.4	4,081.6	12,766.2	556.3	13,322.5
1985	4,631.8	1,252.0	6,883.8	504.4	279.2	1,416.6	4,070.5	12,154.5	538.4	12,692.9
1986	4,588.6	1,023.1	5,611.7	460.1	273.4	1,961.5	4,098.6	11,405.3	474.5	12,879.8
1987	*4,147.8	1,006.8	5,154.6	497.5	92.0	1,821.0	3,611.7	11,176.8	511.0	11,687.8
				(Millions of cubic feet per day)						
1970	9,007	75	9,082	4,296	79	61	1,086	14,604	N.A.	N.A.
1971	9,838	73	9,911	587	N.A.	98	1,794	N.A.	N.A.	N.A.
1972	10,612	72	10,684	690	N.A.	122	2,560	N.A.	N.A.	N.A.
1973	10,894	78	10,972	722	N.A.	282	3,000	N.A.	670	N.A.
1974	11,634	109	11,743	711	N.A.	372	3,600	N.A.	725	N.A.
1975	11,410	148	11,558	3,825	314	362	3,803	19,862	774	20,636
1976	11,791	337	12,128	710	500	639	14,771	28,748	897	29,645
1977	12,320	369	12,689	915	219	1,273	4,679	19,775	996	20,771
1978	14,066	602	14,668	1,001	221	2,459	6,721	25,070	1,064	26,134
1979	14,918	552	15,470	992	500	2,082	7,445	26,489	1,161	27,650
1980	14,706	610	15,316	1,492	508	1,947	7,353	26,616	1,225	27,841
1981	15,196	1,357	16,553	710	339	2,174	8,446	28,222	1,332	29,554
1982	14,935	1,488	16,423	317	580	2,282	8,442	28,044	1,420	29,464
1983	12,297	1,599	13,896	1,450	834	3,262	8,716	28,158	1,482	29,640
1984	14,430	3,443	17,873	1,382	764	3,675	10,875	34,569	1,520	36,089
1985	12,690	3,430	16,120	1,382	765	3,881	11,152	33,300	1,475	34,775
1986	12,537	2,803	15,340	1,257	749	5,374	11,229	33,949	1,300	35,249
1987	*11,364	2,758	14,122	1,363	252	4,989	9,895	30,621	1,400	32,021

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* Estimate from Offshore Magazine.
N.A. Not Available

Source: U.S. Production--U.S. Department of Interior, Minerals Management Service.
Rest of World--Offshore Magazine

Section XI
Table 6

PRODUCTION AND VALUE OF U.S. NATURAL GAS
ONSHORE - OFFSHORE

Year	PRODUCTION (Millions of Cubic Feet)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
Cumulative to 1953	142,838,325	91,675	142,930,000	$ --	$ --	$ --
1954	8,671,935	70,611	8,742,546	875,370	7,131	882,501
1955	9,296,219	109,132	9,405,351	967,008	11,349	978,357
1956	9,957,253	124,670	10,081,923	1,070,405	13,407	1,083,812
1957	10,527,855	152,403	10,680,258	1,184,610	17,149	1,201,759
1958	10,806,671	223,607	11,030,298	1,290,786	26,706	1,317,492
1959	11,732,065	314,050	12,046,115	1,516,214	40,856	1,556,800
1960	12,362,872	408,166	12,771,038	1,732,763	57,207	1,789,970
1961	12,802,998	451,027	13,254,025	1,928,309	67,932	1,996,241
1962	13,246,639	629,983	13,876,622	2,047,904	97,397	2,145,301
1963	13,906,600	759,959	14,666,559	2,207,391	120,639	2,328,030
1964	14,622,301	839,842	15,462,143	2,257,990	129,699	2,387,689
1965	15,108,715	931,038	16,039,753	2,349,734	144,808	2,494,542
1966	15,846,670	1,359,958	17,206,628	2,489,133	213,626	2,702,759
1967	16,472,127	1,699,198	18,171,325	2,710,170	279,571	2,989,741
1968	17,002,857	2,319,543	19,322,400	2,788,319	380,369	3,168,688
1969	17,952,811	2,745,429	20,698,240	2,997,262	458,353	3,455,615
1970	18,633,254	3,287,388	21,920,642	3,183,940	561,740	3,745,680
1971	19,352,162	3,590,850	22,943,012	3,446,063	639,419	4,085,482
1972	18,647,813	3,883,885	22,531,698	3,459,876	720,586	4,180,462
1973	18,671,095	3,976,454	22,647,549	4,034,771	859,301	4,894,072
1974	17,354,017	4,246,505	21,600,522	5,281,137	1,292,265	6,573,402

(1) Total dollar value distributed in proportion to percentage of production onshore and offshore.

Sources: U.S. Total Production and Total Dollar Value at the Wellhead, U.S. Bureau of Mines
U.S. Offshore Production, U.S. Geological Survey
Distribution of production and value computed by the American Petroleum Institute

PRODUCTION AND VALUE OF U.S. NATURAL GAS
ONSHORE - OFFSHORE

	PRODUCTION (Millions of Cubic Feet)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
Year	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
1975	15,943,934	4,164,727	20,108,661	$ 7,092,450	$ 1,852,612	$ 8,945,062
1976	15,637,042	4,315,396	19,952,438	9,069,032	2,502,744	11,571,776
1977	15,528,536	4,496,927	20,025,463	12,272,078	3,553,876	15,825,954
1978	14,839,994	5,134,039	19,974,033	13,430,116	4,616,384	18,076,500
1979	15,026,356	5,444,904	20,471,260	17,699,890	6,413,744	24,113,634
1980	14,996,551	5,382,236	20,378,787	23,586,880	8,465,302	32,052,182
1981	14,631,239	5,546,462	20,177,701	28,969,884	10,981,964	39,951,848
1982	13,053,625	5,466,050	18,519,675	32,075,219	13,421,546	45,496,765
1983	12,087,301	4,734,843	16,822,144	31,358,731	12,255,638	43,614,369
1984	13,009,577	5,220,061	18,229,638	34,560,892	13,843,719	48,404,611
1985	12,566,243	4,631,756	17,197,999	31,566,479	11,616,119	43,182,598
1986	12,202,344	4,588,566	16,790,910	23,705,889	8,901,936	32,607,825

(1) Total dollar value distributed in proportion to percentage of production onshore and offshore

Source: U.S. Energy Information Administration, Natural Gas Annuals
Distribution of production and value computed by the American Petroleum Institute

Section XI
Table 7

TOTAL OFFSHORE WELLS DRILLED IN THE UNITED STATES(1)
FEDERAL AND STATE LEASES
Alltime to January 1, 1985

	EXPLORATORY WELLS				DEVELOPMENT WELLS				TOTAL WELLS			
	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total
ALASKA												
State	19	7	54	80	259	13	32	304	278	20	86	384
Federal	1	--	19	20	--	--	--	--	1	--	19	20
Total	20	7	73	100	259	13	32	304	279	20	105	404
CALIFORNIA												
State	20	10	139	169	3152	22	309	3483	3172	32	448	3652
Federal	24	0	155	179	364	3	18	385	388	3	173	564
Total	44	10	294	348	3516	25	327	3868	3560	35	621	4216
OREGON												
Federal	--	--	8	8	--	--	--	--	--	--	8	8
WASHINGTON												
State	--	--	2	2	--	--	--	--	--	--	2	2
Federal	--	--	4	4	--	--	--	--	--	--	4	4
Total	--	--	6	6	--	--	--	--	--	--	6	6
PACIFIC COAST												
Federal	--	--	38	38	--	--	--	--	--	--	38	38
PACIFIC OCEAN												
State	39	17	195	251	3411	35	341	3787	3450	52	536	4038
Federal	25	--	224	249	364	3	18	385	389	3	242	634
Total	64	17	419	500	3775	38	359	4172	3839	55	778	4672
FLORIDA												
State	--	--	15	15	--	--	--	--	--	--	15	15
Federal	--	--	9	9	--	--	--	--	--	--	9	9
Total	--	--	24	24	--	--	--	--	--	--	24	24
LOUISIANA												
State	61	96	920	1077	1851	538	757	3146	1912	634	1677	4223
Federal	206	253	3079	3538	6293	3745	3723	13761	6499	3998	6802	17299
Total	267	349	3999	4615	8144	4283	4480	16907	8411	4632	8479	21522
TEXAS												
State	35	182	700	917	51	145	121	317	86	327	821	1234
Federal	10	91	1032	1133	53	309	579	941	63	400	1611	2074
Total	45	273	1732	2050	104	454	700	1258	149	727	2432	3308

(1) Offshore wells are defined as those producing from beyond natural shore lines.

Source: American Petroleum Institute

TOTAL OFFSHORE WELLS DRILLED IN THE UNITED STATES(1)
FEDERAL AND STATE LEASES
Alltime to January 1, 1985

	EXPLORATORY WELLS				DEVELOPMENT WELLS				TOTAL WELLS			
	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total
N. GULF OF MEXICO												
Federal	--	--	241	241	69	19	58	146	69	19	299	387
GULF OF MEXICO												
State	96	278	1635	2009	1902	683	878	3463	1998	961	2513	5472
Federal	216	344	4361	4921	6415	4073	4360	14848	6631	4417	8721	19769
Total	312	622	5996	6930	8317	4756	5238	18311	8629	5378	11234	25241
ALABAMA												
State	--	2	--	2	1	1	1	3	1	3	1	5
ATLANTIC OCEAN												
Federal	--	--	36	36	--	--	--	--	--	--	36	36
GRAND TOTAL												
State	135	297	1830	2262	5314	719	1220	7253	5449	1016	3050	9515
Federal	241	344	4621	5206	6779	4076	4378	15233	7020	4420	8999	20439
Total	376	641	6451	7468	12093	4795	5598	22486	12469	5436	12049	29954

(1) Offshore wells are defined as those producing from beyond natural shore lines.

Source: American Petroleum Institute

Section XI
Table 8

ACCUMULATED PRODUCTION STATE AND FEDERAL OFFSHORE LEASES
ALLTIME TO JANUARY 1, 1987

	Oil & Lease Condensate M bbls	Percent of Total	Gas MMCF	Percent of Total
ALASKA				
State	863,190	100	1,320,514	100
Federal	--	--	--	--
CALIFORNIA				
State	1,997,624	84	767,152	76
Federal	368,973	16	242,805	24
Subtotal	2,366,597		1,009,957	
WEST COAST				
State	2,860,814	89	2,087,666	90
Federal	368,973	11	242,805	10
Subtotal	3,229,787		2,330,471	
LOUISIANA				
State	1,414,766	17	10,425,692	13
Federal	7,007,232	83	66,523,817	87
Subtotal	8,421,998		76,949,509	
TEXAS				
State	32,437	18	3,212,424	29
Federal	151,575	82	7,949,386	71
Subtotal	184,011		11,161,810	
GULF OF MEXICO				
State	1,447,203	17	13,638,116	15
Federal	7,158,807	83	74,473,203	85
Subtotal	8,606,010		88,111,319	
TOTAL				
State	4,308,017	36	15,725,782	17
Federal	7,527,780	64	74,716,007	83
GRAND TOTAL	11,835,797		90,441,790	

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 9

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	First Year Rental (Dollars)	Total Bid Per Acre (Dollars)	Average Bid Per Acre (Dollars)
10/13/54	La.	199	748,000	90	394,721	$ 116,378,476	$ 1,184,175	$ 295	$ 1,220
11/09/54	Tex.	38	111,788	19	67,149	23,357,029	201,450	348	2,209
07/12/55	Tex.	39	216,000	27	149,760	8,437,462	449,280	56	177
07/12/55	La.	171	458,095	94	252,807	100,091,263	758,442	396	2,077
07/26/59	Fla.	80	458,000	23	132,480	1,711,872	397,440	13	16
08/11/59	La.	38	81,813	19	38,820	88,035,121	388,200	2,268	10,442
02/26/60	Tex.	97	437,760	48	240,480	35,732,031	721,440	149	1,026
02/26/60	La.	288	1,173,223	99	464,046	246,909,784	1,392,159	532	2,502
03/13/62	La.	401	1,808,276	206	951,811	177,260,305	2,855,433	186	3,201
03/16/62	Tex.	30	90,720	10	28,800	557,720	86,400	19	26
03/16/62	La.	380	1,780,265	195	927,746	267,775,727	2,783,238	289	3,081
10/09/62	La.	19	33,855	9	16,178	43,887,359	161,780	2,713	8,480
05/14/63	Cal.	129	669,777	57	312,945	12,807,587	938,838	41	455
04/28/64	La.	28	34,028	23	32,673	60,340,626	326,780	1,847	10,490
10/01/64	Ore.	149	836,134	74	425,433	27,768,772	1,276,302	65	376
10/01/64	Wash.	47	253,940	27	155,420	7,764,928	466,260	50	310
03/29/66	La.	18	35,993	17	35,056	88,845,963	350,570	2,534	6,112
10/18/66	La.	52	227,898	24	104,717	99,164,930	523,600	947	3,128
12/15/66	Cal.	1	1,995	1	1,995	21,189,000	9,980	10,621	10,621
06/13/67	La.	206	971,489	158	744,456	510,079,178	2,233,458	685	6,500
02/06/68	Cal.	110	540,609	71	363,181	602,719,262	1,089,543	1,660	11,374
05/21/68	Tex.	169	728,551	110	541,304	593,899,046	1,623,915	1,097	7,602
11/19/68	La.	26	46,824	16	29,682	149,868,789	296,820	5,049	27,401
01/14/69	La.	38	96,389	20	48,505	44,037,339	485,050	908	2,161
12/16/69	La.	27	93,764	16	60,153	66,908,196	601,550	1,112	6,600
07/21/70	La.	34	73,360	19	44,642	97,769,013	446,420	2,190	8,201
12/15/70	La.	127	593,485	119	553,898	847,295,760	1,661,694	1,536	12,875
11/04/71	La.	18	55,872	11	37,222	96,304,522	372,230	2,587	18,005
09/12/72	La.	78	366,682	62	290,321	585,827,925	870,996	2,018	21,870
12/19/72	La.	132	604,029	116	535,874	1,665,519,631	1,607,661	3,108	21,630
06/19/73	La.	5	25,000	4	20,000	53,901,709	60,000	2,695	4,892
06/19/73	Tex.	124	672,643	96	527,173	1,537,495,671	1,581,519	2,916	13,491
12/20/73	Ala.	44	248,636	13	74,106	135,834,100	222,318	1,833	7,507
12/20/73	Fla.	85	489,600	62	357,120	1,100,399,131	1,071,360	3,081	36,805
12/20/73	La.	9	27,221	6	19,611	139,130,000	58,839	7,094	20,757
12/20/73	Miss.	9	51,840	6	34,560	115,702,000	103,680	3,348	7,013
03/28/74	La.	206	930,918	91	421,218	2,092,510,854	1,263,675	4,968	33,772
05/29/74	Tex.	245	1,355,678	102	565,112	1,471,851,831	1,695,336	2,605	13,372
07/30/74	La.	115	508,173	9	46,988	7,971,900	140,967	170	1,563
07/30/74	Tex.	143	790,566	10	53,253	22,264,900	159,762	418	1,108
10/16/74	La.	297	1,421,54	144	675,587	1,428,261,330	2,026,812	2,114	39,111
TOTAL		4,451	20,150,435	2,323	10,772,003	14,793,568,042	34,945,372	1,373	

Source: U.S. Department of the Interior, U.S. Geological Survey

Section XI
Table 9a

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	Total First Year Rental (Dollars)	Average Bid Per Acre (Dollars)	Highest Bid Per Acre (Dollars)
Cumulative totals 1954-1974		4,451	20,150,435	2,323	10,772,003	$14,793,568,042	$34,945,372	$1,373	--
02/04/75	Tex.	515	2,870,344	113	626,585	274,690,955	1,897,761	438	$ 3,566
05/28/75	La.	247	1,153,772	77	355,102	207,064,050	1,065,336	583	5,085
05/28/75	Tex.	36	192,660	9	51,840	25,852,000	155,520	499	1,508
07/29/75	La.	160	762,456	43	206,701	118,360,638	620,106	573	2,732
07/29/75	Tex.	185	1,010,502	23	129,600	44,853,368	388,800	346	1,842
12/11/75	Cal.	231	1,257,593	56	310,049	417,312,141	930,147	1,346	18,260
02/18/76	La.	41	181,610	18	74,823	134,554,317	224,477	1,798	10,678
02/18/76	Tex.	31	155,702	12	63,423	37,382,176	190,270	589	2,126
02/18/76	Fla.	60	350,292	4	23,040	4,040,000	69,120	175	280
04/13/76	Ak.	189	1,008,499	76	409,057	599,836,587	1,226,718	1,369	11,023
08/17/76	MAL(1)	154	876,750	93	529,466	1,127,936,425	1,714,176	2,130	18,933
11/16/76	La.	55	225,660	39	160,819	348,037,718	482,472	2,164	23,606
11/16/76	Tex.	6	28,828	4	17,308	31,111,244	51,924	1,798	4,200
06/23/77	La.	187	867,176	97	454,711	813,991,004	1,364,130	1,790	14,454
06/23/77	Tex.	36	207,360	27	150,723	356,102,428	452,172	2,363	13,520
10/27/77	Ak.	135	768,588	87	495,307	398,471,313	1,603,584	804	13,525
03/28/78	S.Al.	224	1,275,301	43	244,813	100,743,443	792,576	412	1,650
04/25/78	La.	87	392,894	57	262,250	503,820,339	789,770	1,921	11,038
04/25/78	Tex.	58	316,833	33	176,506	229,836,554	526,513	1,300	6,312
10/31/78	Al.	18	103,375	7	40,015	17,353,000	120,045	433	1,302
10/31/78	Fla.	71	408,334	28	161,280	43,823,730	483,840	272	1,422
12/19/78	La.	79	366,427	52	248,020	512,053,605	809,453	2,065	18,778
12/19/78	Tex.	49	277,560	29	164,396	359,411,393	539,635	2,186	12,384
02/28/79	MAL(1)	109	620,557	39	222,038	40,001,631	718,848	180	6,832
06/29/79	Ca.	148	792,845	54	288,260	572,825,418	867,489	1,987	37,280
07/31/79	La.	81	361,747	53	254,497	867,937,556	763,514	3,410	35,963
07/31/79	Tx.	42	215,770	28	136,685	379,551,466	410,056	2,777	33,779
11/27/79	La.	96	433,081	72	320,719	1,653,253,077	962,190	5,155	41,320
11/27/79	Tx.	28	155,520	18	100,800	260,084,860	302,400	2,580	9,323
12/11/79	Ak.	46	172,320	24	85,776	488,691,138	277,808	5,697	43,802
12/18/79	NA(2)	116	660,409	63	358,671	816,516,546	1,161,216	2,277	34,852
09/30/80	La.	192	909,575	116	551,643	2,676,927,673	1,654,962	4,853	52,467
10/21/80	Ak.	210	1,195,569	35	199,261	109,751,073	645,120	551	3,602
11/18/80	Tx.	81	458,308	67	383,323	1,417,961,511	1,149,969	3,699	29,341
TOTAL (1954-1980)		9,358	42,857,357	3,980	19,142,130	30,779,503,142	60,525,536	1,608	

(1) Middle Atlantic
(2) North Atlantic

Source: U.S. Department of the Interior, U.S. Geological Survey, Outer Continental Shelf Statistics

Section XI
Table 9b

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	Total First Year Rental (Dollars)	Average Bid Per Acre (Dollars)	Highest Bid Per Acre (Dollars)
05/28/81	S.Ca.	111	603,613	60	320,567	2,088,881,824	1,037,904	6,516	65,014
06/30/81(5)	Ak.	175	996,308	1	5,694	170,496	18,432	30	417
07/21/81	GOM(3)	212	1,077,913	156	799,899	2,649,628,752	2,399,736	3,312	37,444
08/04/81	So. Atl.	285	1,622,557	47	267,580	342,766,174	866,304	1,281	18,228
09/29/81	Cook In.	153	858,247	13	73,157	4,405,899	236,856	60	407
10/20/81	GOM	209	1,081,364	102	508,287	1,243,468,752	1,524,903	2,446	53,313
12/08/81	MAL	253	1,440,376	51	290,352	323,659,000	921,600	1,115	7,284
02/09/82	GOM	234	1,219,826	115	590,265	1,193,654,719	1,770,795	2,022	N.A.
06/11/82	So. Ca.	140	716,840	29	147,066	117,875,281	443,913	802	N.A.
08/05/82(4)	Atl,Ca.,Ak.	554	3,142,068	36	204,955	11,149,450	663,552	54	N.A.
10/13/82	Ak.	338	1,825,770	121	662,861	2,055,632,336	2,146,112	3,101	N.A.
11/17/82	GOM	144	732,570	56	281,213	609,178,223	843,657	2,166	N.A.
03/08/83	GOM	125	665,478	11	58,117	37,570,900	174,360	646	N.A.
03/15/83	Ak-NB	418	2,379,751	59	335,898	317,873,372	1,087,488	946	N.A.
04/12/83	Ak-SG	479	2,688,787	96	540,917	426,458,830	1,751,248	788	N.A.
04/26/83	MAL	4,050	22,664,991	37	210,648	68,410,240	681,984	325	N.A.
05/25/83	CGOM	7,050	37,156,426	623	3,089,812	3,367,606,134	9,269,616	1,090	N.A.
07/26/83	SAL	3,582	20,392,985	11	62,625	13,362,040	202,752	213	N.A.
08/24/83	WGOM	5,848	32,620,248	406	2,246,005	1,501,712,517	6,738,015	668	N.A.
11/30/83	S.Ca.	137	768,341	8	43,801	16,022,336	141,808	366	N.A.
01/05/84	EGOM	8,868	50,631,513	156	897,786	310,586,261	2,693,358	346	N.A.
04/17/84	Ak.Nav.	5,036	28,048,995	180	1,024,772	624,491,331	2,784,366	609	N.A.
04/24/84	CGOM	6,502	34,743,780	453	2,278,129	1,323,036,649	6,834,537	581	N.A.
07/18/84	WGOM	5,446	30,038,593	361	1,949,186	844,850,488	5,847,639	433	N.A.
08/22/84	AK-Diap.	1,419	7,773,447	231	1,230,486	871,964,327	3,910,184	709	N.A.
10/17/84	S.Ca.	657	3,147,352	23	114,363	62,121,252	347,157	543	N.A.
05/22/85	CGOM	4,531	24,006,157	409	2,076,907	1,079,377,760	6,230,829	520	N.A.
08/14/85	WGOM	4,879	27,199,074	195	1,075,188	359,175,656	3,225,597	334	N.A.
12/18/85	EGOM	6,344	35,823,478	63	359,948	100,911,298	1,079,844	280	N.A.
04/30/86	CGOM	5,837	31,382,152	101	504,806	130,276,757	1,514,442	258	
08/27/86	WGOM	4,887	27,287,951	41	229,612	56,817,990	688,839	247	
TOTAL (1954-1986)		88,277	478,157,910	8,231	41,627,654	52,932,599,938	128,603,363	N.A.	N.A.

(1) Middle Atlantic
(2) North Atlantic
(3) Gulf of Mexico
(4) Resale

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 10

U.S. OUTER CONTINENTAL SHELF
REVENUE AND PRODUCTION VALUE
PERCENTAGE CUMULATIVE REVENUE OF CUMULATIVE PRODUCTION VALUE
CALENDAR YEARS
(Thousands of Dollars)

Year All States	Bonuses	Minimum Royalties	Rentals	Shut-in Gas Payments	Royalties	Total Revenue	Total Cumulative Revenue	Total Production Value	Cumulative Production Value
1953	--	--	1,359.6	30.7	967.9	2,358.2	2,358.2	5,036.9	5,036.9
1954	140,969.0	--	3,855.3	87.0	2,749.0	147,660.3	150,018.4	14,370.1	19,407.0
1955	108,528.7	--	3,406.4	122.0	5,140.0	117,197.1	267,215.5	27,060.7	46,467.6
1956	--	--	4,006.2	80.0	7,629.4	11,715.5	278,931.0	39,497.9	85,965.5
1957	--	68.6	3,270.1	110.3	11,391.2	14,840.2	293,771.3	61,072.6	147,038.1
1958	--	184.4	2,420.6	121.2	17,423.9	20,150.1	313,921.3	96,471.1	243,509.2
1959	89,747.0	171.0	2,285.7	85.0	26,540.0	118,828.7	432,750.1	150,472.5	393,981.8
1960	282,717.1	317.0	3,603.1	49.4	37,095.3	323,781.8	756,531.9	200,969.6	594,951.4
1961	--	314.1	3,073.9	37.1	47,920.3	51,345.4	807,877.3	273,636.6	868,587.8
1962	489,481.1	517.7	8,412.2	62.2	66,096.3	564,569.6	1,372,446.9	376,675.9	1,245,263.7
1963	12,807.6	668.3	8,435.2	53.0	76,999.2	98,963.3	1,471,410.2	450,866.5	1,696,130.2
1964	95,874.3	820.3	9,798.6	45.8	88,400.2	194,939.3	1,666,349.4	506,783.5	2,202,913.7
1965	33,740.3	1,072.7	8,731.4	38.5	102,862.5	146,445.4	1,812,794.8	594,222.7	2,797,136.5
1966	209,199.9	1,367.3	6,869.3	41.7	136,987.5	354,465.7	2,167,260.5	801,724.6	3,598,861.1
1967	510,109.7	1,891.5	6,208.9	41.4	157,607.6	675,859.2	2,843,119.7	947,214.7	4,546,075.8
1968	1,346,487.1	2,145.2	8,230.8	52.3	201,136.9	1,558,052.3	4,401,172.0	1,179,912.2	5,725,988.0
1969	111,660.7	1,923.6	8,312.6	41.7	240,090.7	362,029.2	4,763,201.2	1,443,870.5	7,169,858.4
1970	945,064.8	1,745.9	8,607.9	47.7	283,494.6	1,238,960.8	6,002,162.0	1,707,593.5	8,877,451.9
1971	96,304.5	1,891.0	7,742.0	32.3	350,042.5	456,012.3	6,458,174.3	2,135,677.1	11,013,129.0
1972	2,251,347.6	2,019.5	7,984.9	49.6	363,556.3	2,624,957.9	9,083,132.1	2,229,179.1	13,242,308.1
1973	3,082,462.6	2,391.2	8,948.8	52.7	401,126.1	3,494,981.4	12,578,113.6	2,486,864.9	15,729,172.9
1974	5,022,860.8	2,048.4	13,532.8	32.6	560,283.9	5,598,758.4	18,176,872.0	3,570,054.0	19,299,226.9
TOTAL All States	14,829,362.8	21,557.9	139,096.2	1,313.7	3,185,541.5	18,176,872.0	18,176,872.0	19,299,226.9	19,299,226.9

NOTE: Revenue = charges and/or collection--bonuses and first year rentals adjusted from book transfer dates (years) to Geological Survey from Bureau of Land Management, to actual sales dates. Distribution of escrow funds totaling $39,316,545 to the State of Louisiana and Lessees, pursuant to Supreme Court decree dated December 31, 1965, was not deducted from calendar year 1966 revenue charges, nor was the production value of $157 million deducted. 1970 bonuses increased $951,875 and rentals increased $22,500--leases on appeal validated.

Source: U.S. Department of Interior, U.S. Geological Survey, Outer Continental Shelf Statistics, June 1975

Section XI
Table 10a

U.S. OUTER CONTINENTAL SHELF
REVENUE AND PRODUCTION VALUE
PERCENTAGE CUMULATIVE REVENUE OF CUMULATIVE PRODUCTION VALUE
CALENDAR YEARS
(In Thousands of Dollars)

Year All States	Bonuses	Minimum Royalties	Rentals	Shut-in Gas Payments	Royalties	Total Revenue	Total Cumulative Revenue	Total Production Value	Total Cumulative Production Value
Cumulative 1953-1974	$14,829,362.8	$21,557.9	$139,096.2	$1,313.7	$3,185,541.5	$18,176,872.0	$18,176,872.0	$19,299,226.9	$19,299,226.9
1975	1,088,133.2	2,085.9	17,522.0	39.5	594,725.5	1,723,325.1	19,900,196.9	3,924,914.9	23,224,141.8
1976	2,242,898.5	2,128.3	23,370.5	38.4	660,392.7	2,967,860.5	22,868,057.4	4,402,440.0	27,626,581.8
1977	1,568,564.7	1,679.0	19,830.0	21.1	890,469.8	2,509,742.3	25,377,799.7	5,744,056.4	33,400,638.3
1978	1,767,042.1	2,207.2	21,512.7	4.0	1,139,198.2	2,941,111.9	28,318,911.6	7,096,500.1	40,497,138.3
1979	5,078,861.7	2,088.5	20,287.3	6.6	1,512,017.2	6,616,592.1	34,935,503.7	9,273,278.3	49,770,416.6
1980	4,204,640.3	2,291.4	19,062.5	--	2,132,528.7	6,362,657.6	41,298,161.3	13,055,515.8	62,825,932.5
1981	6,652,980.9	2,250.3	21,731.0	--	3,287,279.4	9,965,512.5	51,263,673.7	20,199,823.2	83,025,755.7
1982	3,987,490.0	2,393.8	20,055.2	--	3,814,871.6	7,824,810.6	59,088,484.3	22,573,099.1	105,598,854.8
1983	5,749,016.4	4,463.7	32,463.1	--	3,454,318.1	9,240,261.2	68,328,745.5	21,540,887.5	127,139,742.3
1984	4,037,050.3	3,458.1	35,607.8	--	3,914,724.6	8,040,297.0	76,369,042.5	24,001,446.1	151,141,188.4
1985	1,539,464.7	4,067.3	61,814.6	--	3,612,782.8	5,244,160.0	81,613,202.5	22,153,297.0	173,294,685.5
1986	187,094.7	5,176.6	52,958.2	--	2,533,376.7	2,804,890.2	84,711,161.6	15,711,161.6	189,005,847.0
TOTAL ALL STATES:	52,932,599.9	55,847.9	485,311.2	1,423.3	30,663,838.2	84,418,092.7	81,559,305.0	189,005,847.0	189,005,847.0

Source: U.S. Department of the Interior, Minerals Management Service, Federal Offshore Statistics 1986.

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE	TOTAL AMOUNT OF ALL BIDS RECEIVED	TOTAL BONUS
10/13/54	LA.	$ 302,924,834	$ 116,378,476
11/9/54	TEX.	73,801,896	23,357,029
TOTAL		376,726,730	139,735,505
7/12/55	TEX.	9,027,610	8,437,462
7/12/55	LA.	314,212,441	100,091,264
TOTAL		323,240,051	108,528,726
5/26/59	FLA.	1,711,872	1,711,872
8/11/59	LA.	174,411,628	88,035,120
TOTAL		176,123,500	89,746,992
2/24/60	TEX.	56,400,897	35,732,031
2/24/60	LA.	518,774,752	246,909,784
TOTAL		575,175,649	282,641,815
3/13/62	LA.	314,218,540	177,260,305
3/16/62	TEX.	557,720	557,720
3/16/62	LA.	604,799,998	267,775,677
10/9/62	LA.	66,265,290	43,887,359
TOTAL		985,841,548	489,481,061
5/14/63	CAL.	13,989,953	12,807,587
4/28/64	LA.	93,850,051	60,340,626
10/1/64	ORE.	43,049,543	27,768,772
10/1/64	WASH.	10,530,210	7,764,928
TOTAL		147,429,804	95,874,326
3/29/66	LA.	275,384,739	88,845,963
10/18/66	LA.	185,214,816	99,164,930
12/15/66	CAL.	89,937,020	21,189,000
TOTAL		550,536,575	209,199,893
6/13/67	LA.	1,627,749,269	510,079,178
2/6/68	CAL.	1,293,601,113	602,719,262
5/21/68	TEX.	1,620,393,212	593,899,046
11/19/68	LA.	398,430,736	149,868,789
TOTAL		3,312,425,061	1,346,487,097
1/14/69	LA.	71,036,938	44,037,339
12/16/69	LA.	230,460,743	66,908,196
TOTAL		301,497,681	110,945,535

Source: U.S. Department of the Interior, Bureau of Land Management

Section XI
Table 11a

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
7/21/70	LA.	$ 163,451,158	$ 97,769,013
12/15/70	LA.	2,877,429,559	846,784,660
TOTAL		3,040,880,717	944,553,673
11/4/71	LA.	172,735,981	96,304,523
9/12/72	LA.	1,599,155,464	585,827,925
12/19/72	LA.	6,191,018,227	1,665,519,631
TOTAL		7,962,909,672	2,347,652,057
6/19/73	TEX.-LA.	6,248,160,989	1,591,397,380
12/20/73	MISS., LA.,FLA	3,404,892,969	1,491,065,231
TOTAL		9,653,053,958	3,082,462,611
3/28/74	LA.	6,474,003,574	2,092,510,854
5/29/74	TEX.	3,354,292,556	1,471,851,831
7/30/74	LA.-TEX.	88,799,354	30,236,800
10/16/74	LA.	2,514,518,419	1,427,242,455
10/16/74	LA.ROYALTY	7,238,500	1,018,875
TOTAL		12,438,852,403	5,022,860,815
2/04/75	Texas	$ 484,721,874	$ 274,690,955
5/28/75	La.-Tex.	402,752,335	232,916,050
7/29/75	La.-Tex.	317,001,333	163,214,006
12/11/75	S. Cal.	901,960,364	417,312,141
TOTAL		2,106,435,906	1,088,133,152
2/18/76	FL., LA., TX.	428,003,629	175,976,493
4/13/76	Alaska	1,732,170,868	559,836,587
8/17/76	MAL(1)	3,153,411,802	1,127,936,425
11/16/76	La.-Tx.	833,015,950	379,148,962
TOTAL		6,146,602,249	2,242,898,467
6/23/77	La.-Tx.	2,928,091,214	1,170,093,432
10/27/77	Alaska	643,559,393	388,488,081
	(Royalty)	33,516,288	9,983,232
TOTAL		3,605,166,895	1,568,564,745
3/28/78	S. Al	150,927,700	100,743,443
4/25/78	La.-Tx.	1,559,345,259	733,656,893
10/31/78	Al. Fla., Ms.	87,592,568	61 176,730
12/19/78	La.-Tx.	2,355,263,307	871,464,998
TOTAL		4,153,128,834	1,767,042,064

(1) Middle Atlantic

Source: U.S. Department of the Interior, Minerals Management Service.

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
2/28/79	MAL(1)	$ 66,005,881	$ 40,001,631
6/29/79	Ca.	994,683,700	572,825,418
7/31/79	La.-Tx.	3,333,990,620	1,247,489,022
11/27/79	La.-Tx.	4,683,195,907	1,913,337,938
12/11/79	Ak.	945,445,102	488,691,138
12/18/79	NA(2)	1,270,789,889	816,516,546
TOTAL		11,294,111,099	5,078,861,693
9/30/80	La.	7,109,464,692	2,676,927,673
10/21/80	Ak.	197,417,470	109,751,073
11/18/80	Tx.	3,500,570,271	1,417,961,511
TOTAL		10,807,452,033	4,204,640,257
5/28/81	Ca.	4,885,810,689	2,038,566,639
6/30/81(6)	Ak.	5,582,362	170,496
7/21/81	GOM(4)	5,227,548,535	2,649,628,752
8/04/81	So. Atl.	561,050,365	342,766,174
9/29/81	Co. In.	4,697,309	4,405,899
10/20/81	GOM(4)	2,402,400,552	1,243,468,752
12/08/81	MAL	578,952,000	323,659,000
TOTAL		13,666,041,812	6,602,665,712
2/09/82	GOM	2,683,699,843	1,193,654,719
6/11/82	Ca.	210,486,278	117,875,281
8/05/82	Atl.,Ca.,Ak.	14,439,195	11,149,450
10/13/82	Ak.	4,589,972,518	2,055,632,336
11/17/82	GOM	1,185,091,610	609,178,223
TOTAL		8,683,689,444	3,987,490,009
3/08/83	GOM	48,755,129	37,570,900
3/15/83	Ak.	371,803,984	317,873,372
4/12/83	Ak.	547,731,283	426,458,830
4/26/83	MAL	86,822,680	68,410,240
5/25/83	GOM	4,582,847,288	3,367,606,134
7/26/83	SAL	14,562,040	13,362,040
8/24/83	GOM	2,350,359,669	1,501,712,517
11/30/83	C.Ca.	24,045,646	16,022,336
TOTAL		8,026,927,719	5,749,016,369
1/05/84	EGOM	500,261,361	310,586,261
4/17/84	Ak.Nav.	1,148,701,653	624,491,331
4/24/84	CGOM	2,126,776,904	1,323,036,649
7/18/84	WGOM	1,263,576,675	844,850,488
8/22/84	Ak-Diap.	1,365,968,674	871,964,327
10/17/84	S. Ca.	73,163,686	62,121,252
TOTAL		6,478,448,953	4,037,050,308

(1) Middle Atlantic
(2) North Atlantic
(4) Gulf of Mexico
(6) RESALE

Source: U.S. Department of the Interior, Minerals Management Service.

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
05/22/85	CGOM	$ 1,566,926,725	$ 1,079,377,760
08/14/85	WGOM	519,116,036	359,175,656
12/18/85	EGOM	155,241,798	100,911,298
TOTAL		2,241,284,559	1,539,464,714
04/30/86	CGOM	164,135,937	130,276,757
08/27/88	WGOM	69,498,490	56,817,990
TOTAL		233,634,427	187,094,747

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 12

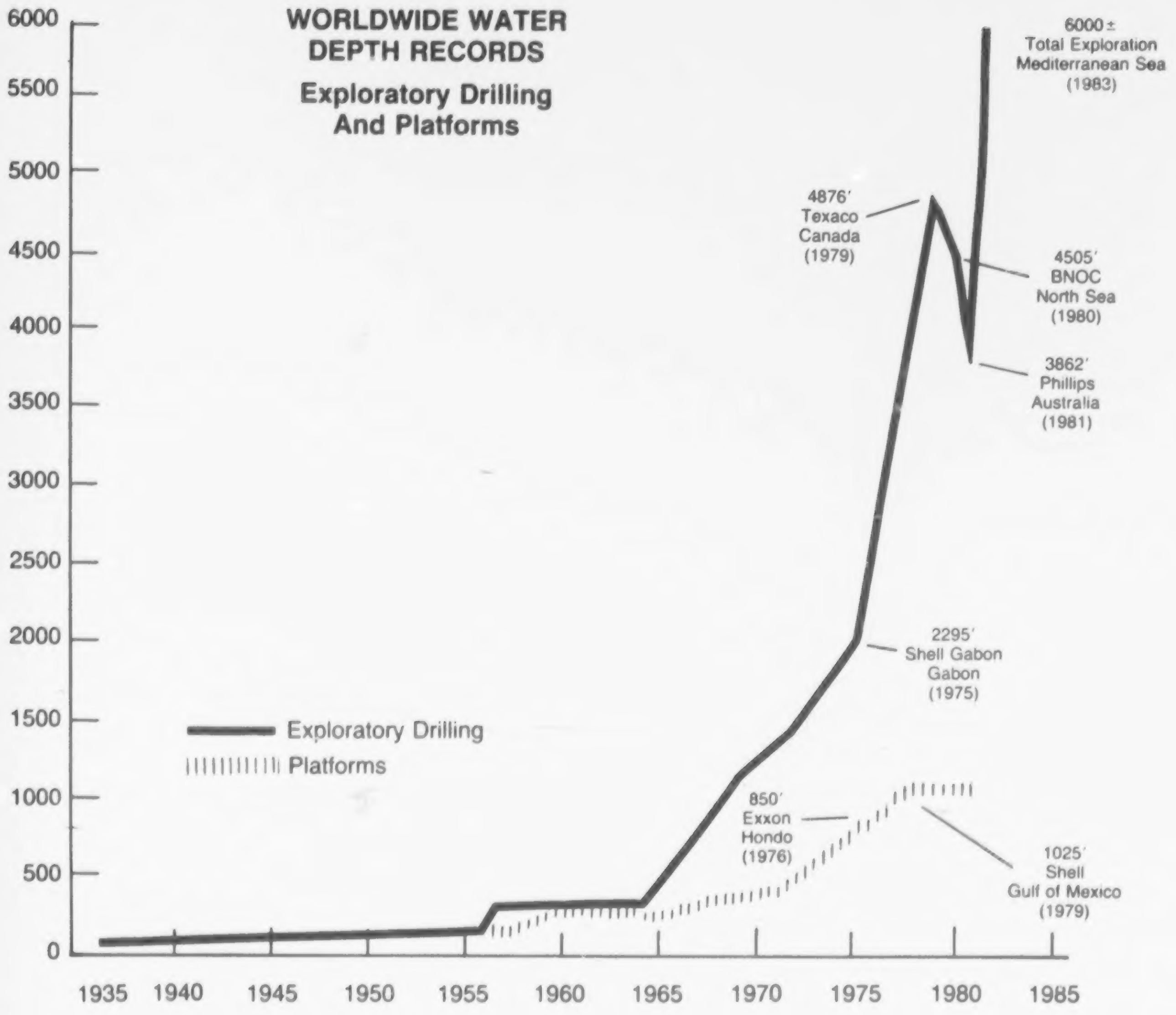
ANNUAL INSTALLATIONS AND REMOVALS OF OFFSHORE PRODUCTION PLATFORMS IN FEDERAL WATERS
as of December 31, 1986

	ALASKA OCS*		ATLANTIC OCS*		GOM OCS		PACIFIC OCS		Year's Net Platform Additions
Year	Installations	Removals	Installations	Removals	Installations	Removals	Installations	Removals	
1953-60	0	0	0	0	474	7	0	0	467
1961	0	0	0	0	111	0	0	0	111
1962	0	0	0	0	123	0	0	0	123
1963	0	0	0	0	86	2	0	0	84
1964	0	0	0	0	130	0	0	0	130
1965	0	0	0	0	126	5	0	0	121
1966	0	0	0	0	116	2	0	0	114
1967	0	0	0	0	134	0	1	0	135
1968	0	0	0	0	107	1	3	0	109
1969	0	0	0	0	105	1	1	0	105
1970	0	0	0	0	124	1	0	0	123
1971	0	0	0	0	101	4	0	0	97
1972	0	0	0	0	121	6	0	0	115
1973	0	0	0	0	98	1	0	0	97
1974	0	0	0	0	52	18	0	0	34
1975	0	0	0	0	100	32	0	0	68
1976	0	0	0	0	111	31	1	0	81
1977	0	0	0	0	116	15	1	0	102
1978	0	0	0	0	164	25	0	0	139
1979	0	0	0	0	159	43	2	0	118
1980	0	0	0	0	169	32	3	0	140
1981	0	0	0	0	171	24	2	0	149
1982	0	0	0	0	192	21	0	0	171
1983	0	0	0	0	179	36	1	0	144
1984	0	0	0	0	224	47	1	0	178
1985	0	0	0	0	199	68	3	0	134
1986	0	0	0	0	97	33	1	0	65
TOTAL	0	0	0	0	3,889	455	20	0	3,454

* There is no production in the Federal Waters offshore of Alaska or on the Atlantic OCS.

NOTE: Gulf of Mexico OCS platform data includes accounting adjustments for 1983, 1984, and 1985. The 1983 removal figures reflect earlier transfers of 5 Federal wells from Federal to State jurisdiction and the conversion of 3 from production to service use. The 1985 installation total includes 47 platforms counted during audits completed in 1985.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.



SOURCE: Offshore Magazine, June 20, 1982

Section XI
Table 14

BLOWOUTS AND SPILLAGE FROM FEDERAL OFFSHORE OIL WELLS COMPARED TO ANNUAL PRODUCTION ON THE OCS, 1971-1986

Year	No. of Well Starts	Drilling Blowouts				Nondrilling Blowouts						Total No. of Blowouts	Spills in Barrels	Production in MMbbls.
		Exploration		Development		Production		Workover		Completion				
		No.	Bbl	No.	Bbl	No.	Bbl	No.	Bbl	No.	Bbl			
1971	864	2	2	0	0	2	450	1	0	0	0	5	450	418.5
1972	856	2	0	1	0	0	0	0	0	0	0	3	0	411.9
1973	829	2	0	1	0	0	0	0	0	0	0	3	0	394.7
1974	801	0	0	1	0	2	75	1	200	0	0	4	275	360.6
1975	841	4	0	0	0	0	0	1	0	1	0	6	0	330.2
1976	1,086	1	0	4	0	1	0	0	0	0	0	6	0	316.9
1977	1,220	2	0	2	0	0	0	3	0	2	0	9	0	303.9
1978	1,139	4	0	5	0	0	0	2	0	1	0	12	0	292.3
1979	1,109	3	0	2	0	0	0	0	0	0	0	5	0	285.6
1980	1,079	3	0	1	0	1	1	2	0	1	0	8	1	277.4
1981	1,109	2	0	1	0	0	0	2	64	5	0	10	64	289.8
1982	1,159	0	0	4	0	0	0	3	0	1	0	8	0	321.2
1983	1,066	3	0	4	0	0	0	1	0	1	0	9	0	348.3
1984	1,136	3	0	2	10	0	0	1	0	0	0	6	10	370.2
1985	1,040	2	0	0	0	1	40	1	0	0	0	4	40	389.3
1986	588	1	0	0	0	0	0	1	0	0	0	2	0	389.2
TOTAL	15,922	34	0	28	10	7	566	19	264	12	0	100	840	5,500.0

Note: Only crude oil and condensate blowout spillage is given here, in barrels for the 100 blowouts that occurred during the past 16 years. Production totals are given in millions of barrels (MMbbl). Information on other than oil and condensate spills may be obtained from the Chief, Offshore Rules and Operations Division, MMS, Reston, Virginia 22091.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 15

CRUDE AND CONDENSATE SPILLS OF ONE BARREL OR MORE IN FEDERAL WATERS
1970-1986

Year	Gulf of Mexico: No. Spills	Gulf of Mexico: Bbls. Spilled	Pacific: No. Spills	* Pacific Bbls. Spilled
1970	7	83,823	0	--
1971	10	1,110	0	--
1972	2	181	0	10,325
1973	3	21,935	0	1,825
1974	8	23,973	0	1,460
1975	0	0	0	1,460
1976	60	4,740	0	1,458
1977	60	919	0	1,458
1978	62	1,382	0	1,456
1979	94	536	0	1,456
1980	42	1,775	1	1,458
1981	50	5,503	6	1,488
1982	42	124	3	1,464
1983	59	520	3	916
1984	47	224	5	770
1985	38	581	3	374
1986	37	227	2	376

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* This column shows estimated seepage from the Santa Barbara blowout of January 28, 1969. Seepage following the blowout has been variously estimated at 10,000 to 71,500 barrels, but totals above do not include the first 10 days. The figure for 1972 includes seepage between February 7, 1969 and December 31, 1972.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 16

HISTORICAL DATA ON LEASING
CONTINENTAL SEABEDS ADJACENT TO THE UNITED STATES
(THOUSANDS OF SQUARE STATUTE MILES)

Region	State Lands(1)	OCS "Shelf" (Between State Limit and 200 Meter Depth)	Continental Slope (Between 200 and 2500 Meter Depths)	Total OCS
Hawaii	--	0.4(2)	3.6	4.0
Alaska	22.9	560.0	212.2	795.1
Pacific Coast States	4.5	15.0	76.2	95.7
Gulf Coast States	13.5	121.0	84.2	218.7
Atlantic Coast States	7.1	129.1	102.5	238.7
Total	48.0	825.5	478.7	1,352.2
		559,040,000Ac.	306,368,000 Ac.	865,408,000 Ac.

		Percent of OCS "Shelf"	Percent of Total OCS
TOTAL FEDERAL OCS ACREAGE EVER OFFERED FOR LEASE THROUGH 8/22/84	329,472,769	58.9	38.1
TOTAL FEDERAL OCS LEASED THROUGH 8/22/84	37,147,323	6.6	4.3
TOTAL FEDERAL OCS CURRENTLY UNDER LEASE 12/31/83(3)	18,500,000	3.3	2.1

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(1) Areas within three nautical miles of coastline, except for Texas and Gulf Coast of Florida where the boundaries are three leagues (nine nautical miles) distant.
(2) Includes state areas.
(3) Approximate acreage figure is used because of constant company relinquishments of leases--approximately 200 leases relinquished each year.

Source: Public Land Law Review Commission
"All Sales" Statistics Compiled by Bureau of Land Management, New Orleans Office, August 1981

Section XI
Table 17

FEDERAL OFFSHORE PLANNING AREAS RANKED BY MARCH 1986 REVISED CONDITIONAL MEAN ESTIMATES OF UNDISCOVERED, ECONOMICALLY RECOVERABLE RESOURCES

	Ranking of OCS Areas	Estimated Acres in Millions	Marg. Prob. of H*	Oil in Barrels	Gas in Tcf	Risked Estimates in Bbls of Oil Equiv.
1.	Central Gulf of Mexico	46	1.00	3.75	30.69	9.18
2.	Western Gulf of Mexico	35	1.00	1.90	26.76	6.66
3.	Southern California	30	1.00	1.54	2.42	1.97
4.	Navarin Basin, AK	37	0.27	4.80	5.84	1.58
5.	Mid-Atlantic	82	1.00	0.36	5.98	1.42
6.	St. George Basin, AK	70	0.22	1.69	15.76	0.99
7.	South Atlantic	99	0.25	0.86	16.18	0.94
8.	Beaufort Sea, AK	52	0.70	1.28	5.62	0.89
9.	Eastern Gulf of Mexico	58	1.00	0.41	2.19	0.80
10.	Chukchi Sea, AK	29	0.20	2.68	15.10	0.54
11.	Central California	15	0.65	0.56	0.79	0.46
12.	Northern California	29	0.60	0.42	1.86	0.45
13.	North Atlantic	49	0.30	0.26	5.06	0.35
14.	Norton Basin, AK	25	0.15	0.64	2.94	0.17
15.	N. Aleutian Basin, AK	32	0.20	0.36	2.62	0.17
16.	Gulf of Alaska	133	0.08	0.54	8.34	0.16
17.	Oregon/Washington	47	0.20	0.18	3.26	0.15
18.	Kodiak, AK	89	0.05	0.15	2.92	0.03
19.	Florida Straits	8	0.11	0.04	1.04	0.02
20.	Cook Inlet, AK	5	0.03	0.21	0.35	0.01
21.	Hope Basin, AK	12	0.02	0.17	1.81	0.01
22.	Shumagin, AK	83	0.03	0.05	1.42	0.01
23.	Aleutian Arc, AK	54	neg.	neg.	neg.	neg.
24.	Aleutian Basin, AK	160	neg.	neg.	neg.	neg.
25.	Bowers Basin, AK	86	neg.	neg.	neg.	neg.
26.	St. Matthew-Hall, AK	51	neg.	neg.	neg.	neg.

* Marginal probability of hydrocarbons (H), given here as a decimal fraction of 1.00 as the certainty, expresses the chance of occurrence of oil and gas in commercial volumes, using existing technology and under current economic conditions.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

U.S. OFFSHORE CRUDE OIL PRODUCTION BY STATE
(Thousands of Barrels)

	Alaska		California		Louisiana		Texas		Total U.S.	
Year	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal
1965	31.9	0	42,772.0	0	53,253.0	144,964.9	553.0	3.7	96,609.9	144,968.6
1966	2,652.7	0	53,294.0	0	56,697.4	187,831.5	367.6	882.6	113,011.7	188,714.1
1967	15,933.0	0	64,807.0	0	65,040.2	218,995.8	280.1	2,865.8	146,060.3	221,861.6
1968	52,524.6	0	83,279.0	2,059.9	66,648.9	263,825.4	536.0	3,110.6	202,988.5	268,995.9
1969	60,887.0	0	89,061.0	9,940.8	67,250.7	300,159.3	223.7	2,759.9	217,422.4	312,860.0
1970	70,472.0	0	79,504.2	24,987.6	72,063.2	333,411.5	779.5	2,247.0	222,818.9	360,646.2
1971	66,793.3	0	70,819.0	31,103.5	69,061.4	385,760.4	474.0	1,685.0	207,147.7	418,548.9
1972	64,336.6	0	73,168.5	22,562.2	71,184.6	387,590.7	739.8	1,733.0	209,429.4	411,885.9
1973	62,427.3	0	70,582.6	18,915.3	54,957.7	374,196.9	667.6	1,617.8	188,635.1	394,730.0
1974	60,630.2	0	67,206.8	16,776.7	46,688.6	342,435.5	578.1	1,381.8	175,103.7	360,594.1
1975	60,709.2	0	64,274.0	15,304.8	40,962.3	313,592.6	353.8	1,340.1	166,299.3	330,237.5
1976	55,190.9	0	56,646.1	13,978.6	38,358.2	301,887.0	708.5	1,054.6	150,903.6	316,920.1
1977	50,575.7	0	48,223.9	12,267.6	33,804.7	290,771.6	2,620.3	909.0	135,224.6	303,948.2
1978	45,712.5	0	43,524.6	12,085.9	32,365.5	278,071.5	2,457.6	2,107.6	124,060.2	292,265.0
1979	38,922.7	0	42,202.6	10,961.1	29,359.9	271,008.9	2,544.1	3,595.5	113,029.3	285,565.5
1980	32,726.5	0	39,978.9	10,198.9	27,591.9	256,688.1	1,962.6	10,502.0	102,259.9	277,389.0
1981	28,447.1	0	39,164.7	19,605.0	26,219.7	255,875.7	1,823.8	14,284.7	95,655.2	289,765.4
1982	24,680.9	0	39,810.6	28,434.2	24,825.6	275,513.5	1,754.3	17,263.8	91,071.4	321,211.5
1983	21,911.9	0	30,527.5	68,230.1	24,314.5	298,093.6	2,286.5	19,710.2	86,215.5	348,331.2
1984	19,631.0	0	39,508.3	30,254.3	26,852.7	318,024.6	2,100.6	21,960.1	88,092.8	370,239.0
1985	12,644.2	0	39,588.8	29,781.5	23,747.8	338,901.9	2,175.6	20,641.0	78,156.5	389,324.3
1986	15,349.2	0	34,697.5	29,227.8	25,719.9	340,152.3	2,091.5	19,835.9	77,858.1	389,216.0

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics, 1986.

Section XI
Table 19

U.S. OFFSHORE DRY NATURAL GAS PRODUCTION BY STATE(1)
(Millions of Cubic Feet)

	Alaska		California		Louisiana		Texas		Total U.S.	
Year	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal
1965	10.9	0	40,770.0	0	217,148.0	645,589.5	27,520.0	0	285,449.0	645,589.5
1966	1,200.1	0	46,839.0	0	282,848.8	965,387.8	21,623.0	42,059.4	352,510.9	1,007,447.2
1967	9,046.3	0	46,732.0	0	395,359.1	1,087,262.8	60,844.6	99,952.9	511,981.9	1,187,215.8
1968	25,806.8	0	85,765.0	799.7	493,015.1	1,413,467.6	190,778.3	109,910.8	795,365.1	1,524,178.1
1969	43,243.5	0	79,058.0	4,845.9	557,680.7	1,822,544.1	110,959.5	127,097.0	790,941.7	1,954,487.0
1970	83,139.5	0	58,892.2	12,229.1	595,318.6	2,273,147.0	131,360.8	133,300.4	868,711.1	2,418,676.6
1971	86,326.3	0	45,776.3	15,671.5	573,461.1	2,634,014.0	108,242.1	127,357.9	813,806.1	2,777,043.4
1972	76,818.6	0	34,747.1	10,033.6	603,638.1	2,881,364.7	130,126.0	147,156.5	845,329.9	3,038,554.8
1973	74,655.1	0	30,596.3	7,286.5	557,250.2	3,055,628.2	102,364.3	148,673.6	764,866.0	3,211,588.4
1974	74,672.5	0	28,931.1	5,573.6	518,580.6	3,349,170.9	109,597.3	159,979.4	731,781.5	3,514,723.9
1975	76,294.5	0	23,320.0	3,951.6	508,462.0	3,332,160.1	97,957.2	122,572.8	706,133.8	3,458,693.5
1976	74,142.8	0	16,983.9	3,475.2	512,934.9	3,499,865.9	113,411.0	92,582.4	719,472.6	3,595,923.5
1977	77,539.5	0	14,237.2	3,290.0	486,096.2	3,647,513.7	181,306.7	86,943.3	759,179.6	3,737,746.9
1978	74,910.5	0	14,196.1	3,472.3	489,728.7	4,149,731.1	170,142.6	231,857.5	748,977.9	4,385,060.9
1979	73,792.4	0	13,550.3	2,866.8	476,965.2	4,158,521.7	207,617.3	511,590.6	771,925.2	4,672,979.1
1980	64,543.2	0	13,074.7	3,107.0	408,784.2	4,013,707.4	254,377.2	624,642.5	740,779.3	4,641,457.0
1981	72,307.3	0	13,470.7	12,766.3	374,439.8	4,106,494.6	236,707.2	730,275.8	696,924.9	4,849,536.7
1982	68,372.5	0	14,007.2	17,750.9	359,349.3	3,803,740.1	246,966.9	858,020.3	688,715.9	4,679,511.3
1983	68,836.8	0	13,853.3	16,024.3	316,254.0	3,173,892.4	148,134.3	850,817.2	547,073.3	4,040,733.9
1984	68,688.2	0	13,836.6	27,806.9	313,362.3	3,578,740.6	112,090.6	931,293.6	507,977.7	4,537,941.1
1985	62,796.0	0	19,483.1	49,164.2	229,971.7	3,116,884.5	108,130.7	834,926.5	420,381.5	4,000,975.2
1986	63,351.0	0	18,252.9	42,689.0	228,128.9	2,927,832.3	115,126.3	978,370.6	424,859.1	3,948,891.8

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(1) Includes casinghead gas.

Source: U.S. Department of Interior, Mineral Management Service, Federal Offshore Statistics, 1986.

SECTION XII. TRANSPORTATION

Table 1. U.S. Gas Utility Industry Miles of Pipeline and Main by Type
Table 2. Total Crude Oil and Petroleum Products Transportated in U.S. by Method of Transportation
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Section XII
Table 1

U.S. GAS UTILITY INDUSTRY
MILES OF PIPELINE AND MAIN, BY TYPE(1)
(Thousands)

Year	Field and Gathering	Transmission Pipeline	Distribution Main	Total
1947	27.1	92.9	211.5	331.4
1948	29.2	97.0	220.1	346.4
1949	30.9	102.9	230.3	364.1
1950	32.9	113.1	241.6	387.5
1951	34.7	120.5	252.5	407.7
1952	38.4	123.4	263.5	425.3
1953	41.5	130.4	274.5	446.4
1954	43.8	139.0	287.7	470.5
1955	45.7	145.9	305.1	496.7
1956	47.6	153.8	323.8	525.2
1957	50.0	160.1	338.7	548.8
1958	52.0	165.4	354.1	571.5
1959(2)	54.1	174.3	371.4	599.8
1960(3)	55.8	183.7	391.4	630.9
1961	56.7	191.9	410.4	659.0
1962	58.7	196.4	428.1	683.2
1963	60.7	200.9	448.3	709.9
1964	61.0	205.4	469.8	736.2
1965	61.7	211.3	494.5	767.5
1966	63.0	217.0	519.6	799.6
1967	63.7	225.4	539.2	828.3
1968	64.4	234.5	562.7	861.6
1969	64.9	248.1	578.6	891.6
1970	66.3	252.2	594.8	913.3
1971	66.2	254.8	610.4	931.4
1972	66.9	258.1	623.1	948.1
1973	65.9	263.1	633.8	962.9
1974	66.4	262.2	645.6	974.1
1975	68.5	262.6	648.2	979.3
1976	70.3	258.2	659.1	987.7
1977	71.5	260.5	666.9	998.9
1978	74.9	260.6	677.5	1,013.0
1979	77.8	263.5	688.5	1,029.8
1980	83.5	266.5	701.8	1,051.8
1981	86.2	269.5	714.1	1,069.8
1982	90.5	271.7	721.2	1,083.4
1983	91.9	273.5	729.7	1,095.1
1984	93.7	271.9	736.8	1,102.4
1985	94.1	271.2	753.4	1,118.7
1986	93.8	271.0	769.3	1,134.1

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(1) Excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of the end of each year.
(2) These figures and those for subsequent years include Hawaii.
(3) These figures and those for subsequent years include Alaska.

SOURCE: American Gas Association, Gas Facts

TOTAL CRUDE OIL AND PETROLEUM PRODUCTS TRANSPORTED IN THE U.S. BY METHOD OF TRANSPORTATION
(In Billions of Ton Miles)

	Pipelines		Water Carriers		Motor Carriers (1)		Railroads		
Year	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Total Crude and Products Ton Miles
1972	475.8	56.73	330.0	39.34	23.0	2.74	10.0	1.19	838.8
1973	507.0	60.10	296.8	35.18	25.0	2.96	14.8	1.76	843.6
1974	506.0	59.69	297.0	35.04	29.0	3.42	15.7	1.85	847.7
1975	507.0	59.88	298.0	35.02	27.6	3.26	14.1	1.66	846.7
1976	515.0	59.35	306.9	35.37	32.5	3.75	13.3	1.53	867.7
1977	546.0	59.13	333.3	36.09	29.6	3.21	14.5	1.57	923.4
1978	585.8	50.49	530.6	45.73	30.6	2.64	13.2	1.14	1,160.2
1979	608.3	51.78	522.9	44.51	30.1	2.56	13.5	1.15	1,174.8
1980	588.2	47.24	617.8	49.61	26.8	2.15	12.5	1.00	1,245.3
1981	563.7	46.27	617.2	50.66	24.9	2.04	12.6	1.03	1,218.4
1982	565.7	46.44	616.9	50.64	22.7	1.86	12.9	1.06	1,218.2
1983	556.1	45.45	630.5	51.53	25.1	2.05	11.8	0.97	1,223.5
1984	568.1	48.14	570.7	48.36	29.2	2.47	12.2	1.03	1,180.2
1985	564.3	47.20	590.4	49.39	28.7	2.40	12.1	1.01	1,195.3
1986	577.9	48.65	568.1	47.83	29.7	2.50	12.1	1.02	1,187.8

(1) Estimate.

Source: Association of Oil Pipelines, Shifts in Petroleum Transportation, 1988.

Section XII
Table 3

U.S. TANK SHIP FLEET (ACTUAL AND T2-SE-A1 EQUIVALENTS)
(Ocean-going vessels of 2,000 gross tons and over)

	ACTUAL FLEET				T2-SE-A1
Year (1)	Number	Gross Tons	Deadweight Tons	Average Speed (knots)	Equivalents
Jan. 1, 1947	951	8,784,894	14,035,000	13.86	800.5
Oct. 1, 1947	744	6,995,223	11,171,400	14.07	646.4
April 1, 1948	621	5,878,786	9,395,500	14.0	541.9
Jan. 1, 1949	593	5,656,497	9,016,200	14.1	524.2
Sept. 1, 1949	578	5,439,009	8,639,800	14.4	513.2
Sept. 1, 1950	559	5,322,698	8,460,700	14.5	505.1
April 1, 1951	560	5,363,699	8,520,800	14.6	510.0
Oct. 1, 1952	550	5,284,400	8,446,400	14.6	508.3
1953	550	5,475,800	8,639,800	14.8	525.3
1954	525	5,376,500	8,446,200	15.0	521.7
1955	490	5,094,900	7,989,500	15.1	497.4
1956	477	5,040,700	7,892,700	15.2	493.4
1957	470	5,097,400	7,959,900	15.4	503.1
1958	474	5,316,100	8,309,200	15.5	529.5
1959	485	5,593,600	8,766,300	15.6	563.0
1960	478	5,664,000	8,894,600	15.7	575.0
1961	469	5,751,400	9,085,300	15.8	590.1
1962	456	5,726,900	9,045,300	15.9	589.8
1963	440	5,631,000	8,912,600	15.9	583.5
1964	422	5,553,400	8,816,300	16.0	579.3
1965	410	5,479,800	8,733,500	16.0	575.8
1966	387	5,343,700	8,549,900	16.1	566.3
1967	382	5,322,800	8,550,700	16.1	566.4
1968	380	5,337,300	8,655,700	16.1	574.6
1969	365	5,319,400	8,797,900	16.1	584.9
1970	350	5,305,800	8,911,000	16.2	593.4
1971	347	5,453,100	9,218,200	16.3	616.5
1972	328	5,411,300	9,253,300	16.4	621.0
1973	312	5,507,000	9,525,200	16.3	640.3
1974	306	5,798,068	10,236,221	16.4	790.0
1975	293	5,943,289	10,601,370	16.4	714.5
1976	290	6,357,974	11,565,138	16.4	779.3
1977	254	6,486,000	11,950,200	16.0	N.A.
1978	271	7,449,900	13,589,200	16.0	N.A.
1979	313	9,061,313	16,559,318	16.3	N.A.
1980	269	7,621,000	14,720,000	16.3	N.A.
1981	274	7,837,000	15,153,800	16.5	N.A.
1982	269	7,792,100	15,100,300	15.6	N.A.
1983	287	8,989,600	16,462,400	16.0	N.A.
1984	286	8,963,600	16,445,700	15.7	N.A.
1985	252	8,442,700	15,542,100	16.0	N.A.

(1) Figures as of December 31; other figures as of date indicated.

Source: 1947-1973--Sun Company, Analysis of World Tank Ship Fleet.
1974-1976--Sun Shipbuilding and Dry Dock Company.
1977-1985--U.S. Department of Transportation, Maritime Administration (Report E2-17).

Section XII
Table 4

WORLD TANK SHIP FLEET (ACTUAL AND T2-SE-A1 EQUIVALENTS)
(Ocean-going vessels of 2,000 gross tons and over)

Year (1)	ACTUAL FLEET Number	Gross Tons	Deadweight Tons	Average Speed (knots)	T2-SE-A1 Equivalents
Jan. 1, 1947	1,925	15,692,962	24,278,900	12.87	1,285.1
Oct. 1, 1947	1,868	15,286,141	23,585,800	13.0	1,271.4
April 1, 1948	1,863	15,364,543	23,692,400	12.9	1,264.3
Jan. 1, 1949	1,872	15,459,372	23,815,800	12.1	1,274.4
Sept. 1, 1949	1,955	16,249,603	24,932,400	13.2	1,352.3
Sept. 1, 1950	2,056	17,567,202	26,957,200	13.3	1,469.7
April 1, 1951	2,131	18,453,538	28,255,100	13.3	1,544.1
Oct. 1, 1952	2,292	20,417,100	31,318,300	13.4	1,726.8
1953	2,502	23,473,900	35,732,300	13.6	2,003.5
1954	2.602	25,733,900	39,137,300	13.9	2,244.0
1955	2,681	27,338,600	41,623,100	14.0	2,398.1
1956	1,778	29,455,500	44,882,600	14.2	2,614.2
1957	2,954	33,046,800	50,424,800	14.4	2,988.2
1958	3,146	37,020,100	56,640,700	14.6	3,403.3
1959	3,276	40,831,500	62,657,800	14.8	3,826.1
1960	3,264	42,801,300	65,780,400	15.1	4,076.0
1961	3,250	44,701,000	68,859,400	15.2	4,304.8
1962	3,259	46,630,100	71,995,700	15.3	4,542.9
1963	3,279	49,168,600	76,179,500	15.4	4,841.3
1964	3,359	54,468,900	85,125,700	15.6	5,455.3
1965	3,436	59,158,200	93,171,900	15.7	5,984.4
1966	3,524	64,787,600	102,908,800	15.7	6,641.4
1967	3,613	69,965,500	112,366,200	15.7	7,274.6
1968	3,775	78,169,730	128,128,100	15.8	8,311.9
1969	3,893	86,821,100	146,029,100	15.8	9,461.5
1970	4,002	97,599,779	167,940,200	15.8	10,924.9
1971	4,207	111,681,295	193,891,100	15.8	12,577.0
1972	4,342	124,431,430	221,204,200	15.8	14,340.5
1973	4,572	142,413,985	256,821,730	15.8	16,634.2
1974	4,892	165,723,032	302,276,779	15.7	19,542.5
1975	5,112	188,212,834	348,586,400	15.7	22,547.7
1976	5,140	203,938,871	382,533,975	15.7	24,762.9
1977	5,013	206,348,687	390,165,427	15.7	25,249.8
1978	4,731	202,581,402	386,123,276	15.7	24,984.4
1979	4,800	205,823,484	390,206,275	15.7	25,257.7

(1) Figures as of December 31; other figures as of date indicated.

Source: Sun Company, Analysis of World Tank Ship Fleet, 1947-1973
Sun Shipbuilding and Dry Dock Company, 1974-1976
Sun Transport Inc., Analysis of World Tank Ship Fleet, 1977-1979

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

Year of Construction	UNITED STATES No.	UNITED STATES Dead-Weight Tons	LIBERIA No.	LIBERIA Dead-Weight Tons	UNITED KINGDOM No.	UNITED KINGDOM Dead-Weight Tons	JAPAN No.	JAPAN Dead-Weight Tons	NORWAY No.	NORWAY Dead-Weight Tons	GREECE No.	GREECE Dead-Weight Tons
Before 1955	110	2,564,988	12	263,014	6	126,106	7	128,688	1	17,281	19	271,416
1955	6	184,687	3	116,360	3	63,162	0	0	0	0	6	105,093
1956	6	185,697	4	104,954	0	0	0	0	2	41,420	14	316,685
1957	10	333,468	7	231,313	1	8,959	1	3,677	1	19,706	7	169,451
1958	13	416,145	11	449,190	6	130,866	1	44,673	1	10,679	22	488,403
1959	15	549,097	18	970,876	6	131,034	2	63,951	3	59,759	20	508,183
1960	9	364,774	12	367,787	7	161,376	0	0	1	19,713	18	550,710
1961	7	310,691	19	680,674	7	248,409	2	54,805	3	125,999	9	283,683
1962	4	225,430	12	445,814	7	258,093	4	276,350	3	63,597	12	442,080
1963	5	201,523	17	1,119,892	7	276,645	1	74,259	3	84,963	15	861,644
1964	5	196,409	43	2,705,875	11	435,930	5	360,103	1	45,975	19	1,332,118
1965	2	95,499	44	2,615,585	13	477,689	10	637,051	1	20,791	25	1,706,697
1966	1	37,884	37	3,117,685	5	228,716	9	667,449	5	317,953	17	1,243,893
1967	1	94,518	40	3,377,269	8	517,065	12	906,582	10	462,106	23	1,927,749
1968	3	113,866	33	3,654,003	16	819,392	10	901,871	12	735,795	13	1,421,729
1969	9	420,703	35	4,570,172	11	1,224,381	20	2,679,922	12	1,368,931	14	2,408,120
1970	11	568,847	56	8,529,683	18	2,315,488	13	2,004,920	17	1,889,124	16	1,948,995
1971	8	473,420	78	10,299,128	21	2,108,182	25	3,593,584	24	2,909,981	14	1,178,692
1972	7	451,733	59	9,906,735	30	2,398,922	33	5,870,899	13	1,761,310	16	1,911,302
1973	8	777,861	68	12,118,784	31	2,980,141	47	5,946,034	23	4,422,034	13	1,075,055
1974	10	851,690	97	16,281,390	31	4,778,593	37	3,512,975	27	3,437,932	9	841,709
1975	13	927,970	117	18,510,541	34	4,417,194	33	4,105,567	34	4,916,093	2	162,390
1976	12	1,170,299	77	12,085,820	15	2,363,920	38	4,441,803	34	3,846,425	10	1,541,028
1977	15	1,620,099	41	6,179,878	11	1,090,012	23	827,266	18	1,550,086	3	525,249
1978	12	1,463,646	22	1,857,941	10	1,413,655	31	428,506	11	969,707	1	32,389
1979	11	1,958,374	22	1,476,313	9	522,296	50	1,194,154	13	476,950	2	167,717
Total	313	16,559,318	984	122,036,676	324	29,496,226	414	38,725,069	273	29,574,310	339	23,422,18
Average Age	11 yrs. 3 mos.		7 yrs. 4 mos.		7 yrs. 1 mo.		7 yrs. 1 mo.		6 yrs. 3 mos.		11 yrs. 6 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

Year of Construction	SPAIN No.	SPAIN Dead-Weight Tons	SINGAPORE No.	SINGAPORE Dead-Weight Tons	ALL OTHERS No.	ALL OTHERS Dead-Weight Tons	TOTAL No.	TOTAL Dead-Weight Tons
Before 1955								
1955	2	16,465	4	61,085	79	1,131,569	287	5,429,086
1956	0	0	1	5,325	12	164,661	45	802,341
1957	0	0	3	53,583	11	195,110	61	1,182,090
1958	0	0	2	42,122	14	225,765	64	1,351,707
1959	3	27,650	5	115,916	17	347,729	106	2,536,999
1960	2	28,810	3	102,158	23	604,936	123	3,724,891
1961	6	88,503	1	20,264	35	944,615	123	3,368,267
1962	2	43,597	0	0	22	562,829	96	2,944,428
1963	4	89,581	2	109,421	24	675,086	102	3,233,310
1964	2	18,710	1	44,066	16	684,269	100	4,307,814
1965	2	59,713	2	8,080	30	1,287,265	171	8,191,772
1966	0	0	3	162,471	35	1,594,501	158	9,193,466
1967	3	188,450	0	0	39	1,353,498	167	9,805,785
1968	4	204,048	1	3,397	39	2,234,075	181	12,501,205
1969	6	336,175	1	75,573	35	2,310,477	199	17,533,105
1970	6	261,297	0	0	30	2,939,636	211	22,518,532
1971	4	420,764	5	244,329	22	1,871,173	239	26,359,351
1972	4	818,344	3	207,544	24	974,059	233	28,527,753
1973	6	568,871	2	188,887	54	4,306,806	317	37,499,439
1974	6	738,787	12	1,023,726	75	6,185,734	364	46,403,267
1975	7	1,033,439	21	1,768,934	74	6,525,784	405	48,540,071
1976	9	1,163,379	15	1,364,351	71	6,076,414	357	43,381,839
1977	12	2,292,617	1	96,531	50	4,813,669	216	22,624,164
1978	7	895,958	0	0	36	1,617,006	161	11,041,870
1979	4	74,469	3	161,600	28	2,312,705	172	9,931,927
TOTAL	101	9,369,627	92	5,912,705	916	52,742,876	4,800	390,206,275
Average Age	5 yrs. 5 mos.		6 yrs. 7 mos.		7 yrs. 9 mos.		7 yrs. 8 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

Year of Construction	SPAIN		SINGAPORE		ALL OTHERS		TOTAL	
	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons
Before 1955								
1955	2	16,465	4	61,085	79	1,131,569	287	5,429,086
1956	0	0	1	5,325	12	164,661	45	802,341
1957	0	0	3	53,583	11	195,110	61	1,182,090
1958	0	0	2	42,122	14	225,765	64	1,351,707
1959	3	27,650	5	115,916	17	347,729	106	2,536,999
1960	2	28,810	3	102,158	23	604,936	123	3,724,891
1961	6	88,503	1	20,264	35	944,615	123	3,368,267
1962	2	43,597	0	0	22	562,829	96	2,944,428
1963	4	89,581	2	109,421	24	675,086	102	3,233,310
1964	2	18,710	1	44,066	16	684,269	100	4,307,814
1965	2	59,713	2	8,080	30	1,287,265	171	8,191,772
1966	0	0	3	162,471	35	1,594,501	158	9,193,466
1967	3	188,450	0	0	39	1,353,498	167	9,805,785
1968	4	204,048	1	3,397	39	2,234,075	181	12,501,205
1969	6	336,175	1	75,573	35	2,310,477	199	17,533,105
1970	6	261,297	0	0	30	2,939,636	211	22,518,532
1971	4	420,764	5	244,329	22	1,871,173	239	26,359,351
1972	4	818,344	3	207,544	24	974,059	233	28,527,753
1973	6	568,871	2	188,887	54	4,306,806	317	37,499,439
1974	6	738,787	12	1,023,726	75	6,185,734	364	46,403,267
1975	7	1,033,439	21	1,768,934	74	6,525,784	405	48,540,071
1976	9	1,163,379	15	1,364,351	71	6,076,414	357	43,381,839
1977	12	2,292,617	1	96,531	50	4,813,669	216	22,624,164
1978	7	895,958	0	0	36	1,617,006	161	11,041,870
1979	4	74,469	3	161,600	28	2,312,705	172	9,931,927
TOTAL	101	9,369,627	92	5,912,705	916	52,742,876	4,800	390,206,275
Average Age	5 yrs. 5 mos.		6 yrs. 7 mos.		7 yrs. 9 mos.		7 yrs. 8 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

Section XII
Table 6

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1983
(GALLONS)

SOURCE	OIL NO.	OIL VOLUME	HAZARDOUS NO.	HAZARDOUS VOLUME	OTHER NO.	OTHER VOLUME	TOTAL NO.	TOTAL VOLUME
VESSELS								
Tank Ships	276	145,778	14	64,729	20	4,250	310	214,757
Tank Barges	561	1,798,055	17	8,717	18	69,081	596	1,875,853
Dry Cargo Barges	13	1,275	0	-	3	97	16	1,370
Dry Cargo Ships	204	102,379	0	-	9	171	13	102,550
Combatants	245	26,265	1	30	6	353	252	26,648
Other	1,131	248,348	4	145	44	797	1,179	249,290
TOTAL	2,430	2,322,098	36	73,621	100	74,749	2,566	2,470,468
LAND VEHICLES								
Rail	29	28,284	2	1,015	2	500	33	29,799
Highway	319	155,021	19	17,457	32	18,200	370	190,678
Other	129	72,463	7	33,695	8	6,326	144	112,484
TOTAL	477	255,768	28	52,167	42	25,026	547	332,961
NON-TRANSPORT, ON/OFFSHORE								
Refinery	72	35,657	10	137,627	8	1,740	90	175,024
Bulk Storage	251	292,480	7	1,960	5	5,670	263	300,110
Onshore Production	134	606,393	0	-	6	169,265	140	775,658
Offshore Production	1,184	112,491	11	164	22	568	1,217	113,223
Other	244	47,477	51	521,687	48	5,538,276	341	6,107,440
TOTAL	1,883	1,094,498	79	661,438	89	5,715,519	2,051	7,471,455
PIPELINES	166	33,963	2	2	2	0	170	33,965
MARINE FAC. ON/OFFSHORE								
Fuel Transfer	24	4,446	0	-	0	0	24	4,446
Bulk Transfer	156	78,024	7	1,672	6	116	169	79,812
Non-Bulk Transfer	3	401	0	-	0	0	3	401
Other	91	81,290	8	182	18	41,658	117	123,130
TOTAL	274	164,161	15	1,854	24	41,774	313	207,789
LAND FACILITIES	47	13,933	5	1,166	9	3,624	61	18,723
MISC/UNKNOWN	4,234	4,483,552	124	1,008,793	606	10,370,959	4,964	15,863,304
GRAND TOTAL	9,511	8,367,973	289	1,799,041	872	16,231,651	10,672	26,398,665

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1983 and 1984.

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1984
(GALLONS)

SOURCE	NUMBER	OIL VOLUME	NUMBER	HAZARDOUS VOLUME	NUMBER	OTHER VOLUME	NUMBER	TOTAL VOLUME
VESSELS								
Tank Ships..................	242	1,906,666	9	2,837	9	20,126	260	1,929,629
Tank Barges.................	524	2,469,002	18	52,902	13	22,005	555	2,543,909
Dry Cargo Barges............	11	2,900	0	0	0	0	11	2,900
Dry Cargo Ships.............	168	1,469,828	0	0	6	22	174	1,469,850
Combatants..................	281	173,850	2	2	7	190	290	174,042
Other.......................	1,170	212,987	4	74	122	413	1,296	13,474
TOTAL....................	2,396	6,235,233	33	55,815	157	42,756	2,586	6,333,804
LAND VEHICLES								
Rail........................	38	26,704	4	328	4	106	46	27,138
Highway.....................	409	45,874	24	31,355	40	28,839	473	206,068
Other.......................	139	149,118	7	268	10	5,741	156	155,127
TOTAL....................	586	321,696	35	31,951	54	34,686	675	388,333
NON-TRANSPORT, ON/OFFSHORE								
Refinery....................	74	86,220	6	4,737	5	8,555	85	99,512
Bulk Storage................	295	1,456,765	12	74,978	14	35,695	321	1,567,438
Onshore Production..........	99	24,178	2	128	3	1,198	104	25,504
Offshore Production.........	1,170	56,555	8	99	13	1,097	1,191	57,751
Other.......................	227	6,465	35	74,631	52	198,324	314	399,420
TOTAL....................	1,865	1,750,183	63	154,573	87	244,869	2,015	2,149,625
PIPELINES...................	54	2,613	1	2	1	42	56	2,657
MARINE FAC. ON/OFFSHORE.....								
Fuel Transfer...............	27	14,193	0	0	0	0	27	14,193
Bulk Transfer...............	150	74,754	10	14,222	8	12,043	168	101,019
~~Non-Bulk Transfer~~...........	3	26	0	0	0	0	3	26
Other.......................	96	27,024	7	5,563	8	18,057	111	50,664
TOTAL....................	276	115,997	17	19,785	16	30,100	309	165,882
LAND FACILITIES.............	69	15,413	8	4,450	14	34,058	91	53,921
MISC/UNKNOWN................	3,952	7,529,425	171	406,989	500	362,058	4,623	8,298,748
GRAND TOTAL.................	9,198	15,970,560	328	673,565	829	748,845	10,355	17,392,970

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1983 and 1984.

TOTAL AND AVERAGE CONSUMPTION OF MOTOR FUEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)
1947	30,872	20,086	651	6,650	7,243	1,089	176	778	4,420
1948	33,394	21,369	640	7,379	8,189	1,110	184	780	4,239
1949(3)	36,453	22,957	630	8,028	8,666	1,079	209	711	3,402
1950(3)	40,334	25,238	626	8,604	9,526	1,107	224	782	3,491
1951(3)	42,662	26,990	632	9,001	10,188	1,132	230	836	3,635
1952(3)	43,818	28,729	656	9,207	10,844	1,178	240	890	3,708
1953(3)	46,460	30,249	654	9,576	11,418	1,192	244	937	3,840
1954	48,413	30,915	639	9,726	12,541	1,289	233	755	3,240
1955	52,092	33,548	644	10,413	13,308	1,278	255	771	3,024
1956	54,249	35,326	651	10,737	13,978	1,302	255	802	3,145
1957	56,375	36,769	652	10,961	14,271	1,302	264	825	3,125
1958	57,392	38,095	644	11,159	14,514	1,301	270	809	2,996
1959(4)	60,132	40,056	666	11,671	15,453	1,324	265	823	3,106
1960	62,258	41,169	661	11,945	15,882	1,330	272	827	3,040
1961	63,870	42,033	658	12,291	16,443	1,338	281	830	2,954
1962	66,638	43,771	657	12,809	17,089	1,334	288	837	2,906
1963	69,842	45,246	648	13,360	18,432	1,380	298	838	2,812
1964	72,969	47,567	652	14,013	19,470	1,389	305	864	2,833
1965	76,634	50,275	656	14,795	19,935	1,347	314	894	2,847
1966	80,106	53,312	666	15,517	20,415	1,316	324	896	2,765
1967	82,367	55,110	669	16,193	21,673	1,338	338	910	2,692
1968	85,793	58,524	682	16,995	23,482	1,382	352	932	2,648
1969	89,156	62,448	700	17,871	24,727	1,384	364	947	2,602
1970	92,095	65,784	714	18,748	25,600	1,365	379	944	2,491
1971	96,144	69,514	723	19,802	27,086	1,368	397	947	2,385
1972	100,658	73,463	730	21,239	30,718	1,446	407	881	2,165
1973	106,119	78,011	735	23,233	31,615	1,361	426	847	1,988
1974	109,823	74,217	676	24,630	31,226	1,268	447	858	1,919

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(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.
(3) Total and average consumption calculated by the American Petroleum Institute for the years 1949-1953; Bureau of Public Roads data not available
(4) Includes Alaska and Hawaii beginning in 1959.

Source: Bureau of Public Roads, "Estimated Motor-Vehicle Travel in the United States and Related Data", Federal Highway Administration
American Petroleum Institute

TOTAL AND AVERAGE CONSUMPTION OF MOTOR FUEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)
1975	111,679	76,457	685	25,776	31,632	1,227	462	895	1,937
1976	115,170	78,847	685	27,779	35,890	1,292	478	964	2,015
1977	118,711	80,677	680	29,562	37,964	1,284	492	984	2,002
1978	121,717	83,775	688	31,703	40,271	1,270	500	1,021	2,041
1979	125,750	80,233	638	33,350	40,859	1,225	520	1,023	1,966
1980	127,448	73,375	603	33,637	40,150	1,194	529	1,076	2,034
1981	129,123	71,718	555	34,451	41,637	1,209	544	1,098	2,019
1982	129,500	72,848	563	35,145	39,416	1,122	559	1,120	2,003
1983	131,723	73,156	555	37,089	41,662	1,123	583	1,136	1,949
1984	133,751	71,180	532	37,394	46,353	1,240	584	1,203	2,061
1985	137,308	69,450	506	39,196	51,037	1,302	593	835	1,407
1986	140,693	71,350	507	40,166	52,943	1,318	594	891	1,500

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.

Source: U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics," Table VM-1

Section XII
Table 8

TOTAL AND AVERAGE TRAVEL BY U.S. MOTOR VEHICLES

Year	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon
1947	300,440	9,732	14.95	66,203	9,955	9.14	4,251	24,153	5.46
1948	319,665	9,573	14.96	74,009	10,030	9.04	4,283	23,277	5.49
1949(3)	342,478	9,395	14.92	77,731	9,682	8.97	4,252	20,344	5.98
1950(3)	363,613	9,015	14.40	90,552	10,524	9.51	4,081	18,219	5.22
1951(3)	392,131	9,187	14.54	94,844	10,537	9.31	4,118	17,904	4.92
1952(3)	410,187	9,361	14.27	99,060	10,759	9.13	4,334	18,058	4.87
1953(3)	435,351	9,370	14.39	104,633	10,927	9.17	4,449	18,234	4.75
1954	450,605	9,308	14.57	105,844	10,833	8.44	4,408	18,918	5.84
1955	487,540	9,359	14.53	111,387	10,697	8.37	4,507	17,675	5.85
1956	507,138	9,348	14.36	116,100	10,813	8.31	4,605	18,059	5.74
1957	529,405	9,391	14.40	113,206	10,328	7.93	4,393	16,640	5.32
1958	544,873	9,494	14.30	115,470	10,348	7.96	4,310	15,963	5.33
1959(4)	572,976	9,529	14.30	123,154	10,552	7.97	4,348	16,408	5.28
1960	588,083	9,446	14.28	126,409	10,583	7.96	4,353	16,004	5.26
1961	604,557	9,465	14.38	128,582	10,461	7.82	4,396	15,644	5.30
1962	629,097	9,441	14.37	133,289	10,406	7.80	4,466	15,507	5.34
1963	645,371	9,240	14.26	155,569	11,644	8.44	4,483	15,044	5.35
1964	677,613	9,286	14.25	164,271	11,723	8.43	4,616	15,134	5.34
1965	711,594	9,286	14.15	171,436	11,587	8.60	4,782	15,229	5.35
1966	751,740	9,384	14.10	173,905	11,207	8.52	4,852	14,975	5.46
1967	774,203	9,399	14.05	182,456	11,268	8.42	4,894	14,479	5.38
1968	814,030	9,488	13.91	196,651	11,571	8.37	4,968	14,114	5.33
1969	858,858	9,633	13.75	206,680	11,565	8.36	5,037	13,838	5.32
1970	900,992	9,783	13.70	214,670	11,450	8.39	5,043	13,306	5.34
1971	954,155	9,924	13.73	227,037	11,465	8.38	5,097	12,807	5.38
1972	1,003,498	9,969	13.67	259,735	12,229	8.46	5,109	12,553	5.80
1973	1,036,455	9,767	13.29	267,147	11,499	8.45	4,960	11,643	5.86
1974	1,013,068	9,225	13.65	267,519	10,861	8.57	5,060	11,320	5.90

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(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.
(3) Total and average consumption calculated by the American Petroleum Institute for the years 1949-1953; Bureau of Public Roads data not available
(4) Includes Alaska and Hawaii beginning in 1959.

Source: Bureau of Public Roads, "Estimated Motor-Vehicle Travel in the United States and Related Data." Federal Highway Administration; after 1969 American Petroleum Institute

Section XII
Table 8a

TOTAL AND AVERAGE TRAVEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon
1975	1,050,472	9,406	13.74	274,454	10,648	8.68	5,148	11,140	5.75
1976	1,098,147	9,535	13.93	307,957	11,086	8.58	5,761	12,045	5.98
1977	1,141,166	9,613	14.15	329,474	11,145	8.68	5,887	11,973	5.98
1978	1,194,287	9,812	14.26	347,909	10,974	8.64	6,072	12,143	5.95
1979	1,162,528	9,245	14.49	360,500	10,810	8.82	6,105	11,732	5.97
1980	1,129,887	8,865	15.32	384,570	11,433	9.58	6,400	12,103	5.95
1981	1,124,843	8,711	15.68	425,127	12,340	10.21	6,501	11,953	5.92
1982	1,191,623	9,202	16.36	394,219	11,217	10.00	6,639	11,872	5.93
1983	1,229,697	9,335	16.81	421,126	11,335	10.11	6,724	11,536	5.92
1984	1,267,291	9,475	17.80	444,054	11,875	9.58	6,736	11,534	5.60
1985	1,269,651	9,247	18.28	499,652	12,747	9.79	4,876	8,216	5.84
1986	1,312,921	9,332	18.40	520,232	12,952	9.83	5,087	8,568	5.71

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.

Source: U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics," Table VM-1

Section XII
Table 9

U.S. CAR SALES BY MARKET-CLASS COMPARISONS

Year	Subcompact	Compact	Intermediate	Standard	Luxury	Import	Total Sales
1970	1.82	19.75	23.50	36.76	2.91	15.26	8,396,595
1971	7.42	15.79	20.84	37.07	3.66	15.22	10,234,027
1972	8.17	15.34	22.59	35.38	3.76	14.76	10,935,365
1973	10.74	16.77	23.37	29.80	3.94	15.83	11,427,478
1974	10.60	22.72	24.41	22.72	3.71	15.85	8,851,265
1975	12.26	22.92	23.85	17.94	4.74	18.29	8,627,883
1976	9.90	24.12	27.76	18.80	4.67	14.78	10,099,573
1977	8.52	21.16	26.40	20.37	5.00	18.55	11,178,554
1978	8.77	22.90	26.60	18.42	5.62	17.69	11,303,909
1979	12.86	20.89	23.79	15.14	5.47	21.85	10,641,099
1980	15.41	20.96	21.37	11.09	4.48	26.69	8,973,345
1981	17.11	20.22	20.40	10.16	4.86	27.25	8,531,531
1982	16.65	17.51	19.03	13.39	5.58	27.84	7,977,570
1983	12.65	16.75	26.17	9.97	8.50	25.96	9,177,777
1984	14.04	18.08	25.54	10.61	8.25	23.48	10,391,775
1985	13.97	17.11	26.39	8.77	8.06	25.70	11,042,658
1986	14.27	14.92	26.31	8.76	7.47	28.27	11,463,092
1987(p)	9.56	19.02	26.32	13.66	N.A.	30.76	10,226,588

(p) Preliminary
N.A. = Not Available

Source: Automotive News, Market Data Book Issues
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Section XII
Table 10

MILEAGE AND DELIVERIES FOR U.S. LIQUID PIPELINES

	Miles of Pipelines				Deliveries (mb)		
		Trunk					
Year	Gathering	Crude	Products	Total	Crude	Products	Total
1979	36,927	58,606	74,261	169,794	6,728,193	4,412,059	11,140,252
1980	35,279	59,560	74,510	169,349	6,404,640	4,194,940	10,599,580
1981	38,588	57,904	76,353	172,815	6,069,575	4,152,962	10,222,537
1982	35,580	59,567	77,402	172,549	5,967,624	4,213,086	10,180,710
1983	30,966	57,466	79,387	167,819	6,020,301	4,289,301	10,309,602
1984	36,072	56,975	80,875	173,922	5,671,448	4,552,237	10,223,685
1985	35,021	55,844	80,536	171,401	6,238,731	4,505,992	10,744,723
1986	34,209	54,153	81,652	170,014	6,286,433	4,715,889	11,082,323

Source: The Oil and Gas Journal, Pipeline Economics issue.

Section XII
Table 11

MILEAGE AND COMPRESSOR STATIONS FOR U.S. NATURAL GAS PIPELINES

Year	Miles of Pipeline				Total Compressor Stations		
	Transmission	Field	Storage	Total	Transmission	Other	Total
1979	190,338	65,520	4,876	260,734	1,113	877	1,990
1980	189,648	68,641	7,252	265,541	1,127	866	1,993
1981	196,942	72,812	4,610	274,634	1,097	860	1,957
1982	204,896	76,073	6,030	286,999	1,116	995	2,111
1983	203,403	75,095	6,706	285,204	1,367	1,342	2,709
1984	187,465	66,172	4,742	258,379	1,152	898	2,050
1985	197,727	77,145	4,523	279,395	1,629	726	2,355
1986	201,467	72,934	7,480	281,881	1,537	911	2,448

Source: The Oil and Gas Journal, Pipeline Economics issue.

BASIC PETROLEUM DATA BOOK

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Section XIII
Table 1

ESTIMATED PROVED WORLD RESERVES OF NATURAL GAS
ANNUALLY AS OF JANUARY 1
(Trillions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist(1) Nations	Total World
1967	289.3	45.0	64.6	398.9	215.1	158.2	32.5	87.7	892.4	150.9	1,043.3
1968	292.9	48.0	67.1	408.0	220.2	167.2	40.1	131.0	966.5	219.0	1,185.5
1969	287.3	46.5	62.9	396.7	223.6	168.3	52.7	138.4	979.7	346.0	1,325.7
1970	275.1	50.7	163.2	489.0	235.1	198.1	67.5	147.5	1,137.8	353.5	1,491.3
1971	290.7(1)	60.5	73.1	424.3	354.1	191.5	56.3	146.7	1,172.9	441.2	1,614.1
1972	278.8(1)	54.4	72.7	405.9	343.8	193.0	69.8	161.6	1,174.1	559.8	1,733.9
1973	266.1(1)	55.0	79.2	400.3	344.0	189.0	101.2	176.6	1,211.1	666.4	1,877.5
1974	250.0(1)	50.3	91.3	391.6	413.1	187.7	114.2	192.2	1,298.8	737.2	2,036.0
1975	237.1(1)	52.5	100.2	389.8	672.4	315.0	115.9	201.1	1,694.2	848.0	2,542.2
1976	228.2(1)	53.4	90.5	372.1	538.1	207.2	111.6	179.9	1,408.9	836.5	2,245.4
1977	216.0(1)	56.0	90.3	362.3	535.9	209.1	120.0	140.9	1,368.2	954.5	2,322.7
1978	208.9(1)	58.0	108.5	375.4	719.1	207.5	122.7	137.3	1,562.0	956.4	2,518.4
1979	200.3(1)	59.0	113.0	372.3	730.2	186.3	119.9	142.4	1,551.1	946.3	2,497.4
1980	194.9(1)	85.5	144.5	424.9	739.8	210.4	128.8	134.9	1,638.8	936.0	2,574.8
1981	199.0(1)	87.3	149.0	435.3	751.9	208.5	126.3	158.3	1,680.3	955.4	2,635.7
1982	201.7(1)	89.9	176.3	467.9	761.9	211.7	127.6	151.2	1,720.3	1,194.7	2,915.0
1983	201.5(1)	97.0	186.6	485.1	769.2	189.4	146.2	157.3	1,747.2	1,283.8	3,031.0
1984	200.2(1)	90.5	186.4	477.1	774.0	189.6	156.2	158.3	1,755.2	1,446.8	3,202.0
1985	197.5(1)	92.3	184.9	474.7	869.4	187.2	166.2	206.7	1,904.2	1,497.4	3,401.6
1986	193.4(1)	99.7	189.3	482.3	855.9	198.3	171.5	226.4	1,934.4	1,546.0	3,480.4
1987	191.6(1)	99.6	190.1	475.1	925.3	201.4	198.6	229.7	2,036.4	1,595.8	3,632.2
1988	187.2(1)	98.0	226.7	511.4	1,084.0	248.6	224.8	218.2	2,287.5	1,510.0	3,797.5

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(1) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska (discovered in 1968) for which transportation facilities are not yet available.

Source: 1967-1980: United States-American Gas Association, Committee on Natural Gas Reserves
1981-1988: United States-Department of Energy
Rest of the World-The Oil & Gas Journal, "Worldwide Report" issues

Section XIII
Table 2

THE SUPPLY OF UNITED STATES NATURAL GAS
(Millions of cubic feet - 14.72 psia at 60 F.)

Year	Proved Reserves at Start of Year	Reserve Revisions, Extensions and Discoveries During Year	Net Change in Underground Storage(4)	Production During Year(1)	Proved Reserves at Year-end
1947	160,575,901	10,980,824	N.A.	5,629,811	165,926,914
1948	165,926,914	13,898,572	51,482	6,007,628	173,869,340
1949	173,869,340	12,674,299	82,746	6,245,041	180,381,344(5)
1950	179,401,693(5)	11,984,290	54,006	6,855,244	184,584,745
1951	184,584,745	15,965,808	132,030	7,923,673	192,758,910
1952	192,758,910	14,267,606	197,766	8,592,716	198,631,566
1953	198,631,566	20,008,051	513,629(2)	9,188,365	210,298,763
1954	210,298,763	9,547,074	90,408	9,375,314	210,560,931
1955	210,560,931	21,897,616	87,164	10,063,167	222,482,544
1956	222,482,544	24,716,115	133,241	10,848,685	236,483,215
1957	236,483,215	20,008,051	178,761	11,439,890	245,230,137
1958	245,230,137	18,896,724	57,582	11,422,651	252,761,792
1959	252,761,792	20,621,249	160,453	12,373,036	261,170,431
1960	261,170,431	13,893,978	281,272	13,019,356	262,326,326
1961	262,326,326	17,166,421	159,544	13,378,649	266,273,642
1962	266,273,642	19,483,958	159,231	13,637,973	272,278,858
1963	272,278,858*	18,164,667	253,733	14,546,025	276,151,233
1964	276,151,233	20,252,139	195,110	15,347,028	281,251,454
1965	281,251,454	21,319,279	150,483	16,252,293	286,468,923
1966	286,468,923	20,220,432	134,523	17,491,073	289,332,805
1967	289,332,805	21,804,333	151,403	18,380,838	292,907,703
1968	292,907,703	13,697,008	118,569	19,373,428	287,349,852
1969	287,349,852	8,375,004	107,169	20,723,190	275,108,835
1970	275,108,835	37,196,359(3)	402,018	21,960,804	290,746,408(3)
1971	290,746,408(3)	9,825,421	310,301	22,076,512	278,805,618(3)
1972	278,805,618(3)	9,634,563	156,563	22,511,898	266,084,846(3)
1973	266,084,846(3)	6,825,049	-354,282	22,605,406	249,950,207(3)
1974	249,950,207(3)	8,679,184	-178,424	21,318,470	237,132,497(3)

N.A. Not Available

(1) Estimated.

(2) All native gas in storage reservoirs formerly classified as proved reserves of natural gas is included in this figure.

* Excludes gas loss due to natural gas liquids recovery.

(3) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska, (discovered in 1968).

(4) The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories. (Adjustments include change of reporting basis starting in 1973 to report only gas reserves considered recoverable, in effect, reducing gas reserves by 1,024,140 MMCF that would have been reported since 1972 using former basis).

(5) Natural gas reserves have been revised back to 1950. Because of this, proved reserves at year-end 1949 and proved reserves at start of year 1950 are not the same.

Source: American Gas Association, Committee on Natural Gas reserves, GAS FACTS

Section XIII
Table 2a

THE SUPPLY OF UNITED STATES NATURAL GAS
(Millions of cubic feet - 14.72 psia at 60 F.)

Year	Proved Reserves at Start of Year(3)	Reserve Revisions, Extensions and Discoveries During Year	Net Change in Underground Storage(4)	Production During Year(1)	Proved Reserves at Year-end(3)
1975	237,132,497	10,483,688	302,561	19,718,570	228,200,176
1976	228,200,176	7,555,468	-187,550	19,542,020	216,026,047
1977	216,026,047	11,851,924	446,930	19,447,050	208,877,878
1978	208,877,878	10,586,144	148,733	19,311,048	200,301,707
1979	200,301,707	14,285,947	239,323	19,910,353	194,916,624
1980(5)	200,997,000	16,723,000	N.A.	18,699,000	199,021,000
1981	199,021,000	21,446,000	N.A.	18,737,000	201,730,000
1982	201,730,000	17,288,000	N.A.	17,506,000	201,512,000
1983	201,512,000	14,523,000	N.A.	15,788,000	200,247,000
1984	200,247,000	14,409,000	N.A.	17,193,000	197,463,000
1985	197,463,000	11,891,000	N.A.	15,985,000	193,369,000
1986	193,369,000	13,827,000	N.A.	15,610,000	191,586,000
1987	191,586,000	11,739,000	N.A.	16,114,000	187,211,000

N.A. Not Available
(1) Estimated.
(3) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska.
(4) The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories. (Adjustments include change of reporting basis starting in 1973 to report only gas reserves considered recoverable, in effect, reducing gas reserves by 1,024,140 MMCF that would have been reported since 1972 using former basis).
(5) Beginning in 1980, the data used are from the Department of Energy. Because of different methodology, the reserves at start of year (from DOE) differ from reserves at year-end 1979 (from AGA).

Source: 1975-1979--American Gas Association, Committee on Natural Gas Reserves, GAS FACTS.
1980-1987--U.S. Department of Energy, Energy Information Administration, US Crude and Natural Gas and NGL Reserves.

THE RESERVES OF U.S. NATURAL GAS LIQUIDS
(Thousands of Barrels)

Year	Proved Reserves at Start of Year	Reserve Revisions Extensions & Discoveries	Production	Proved Reserves at Year-end	Indicated Years Supply at Year-end
1947	3,163,219	251,538	160,782	3,253,975	20.2
1948	3,253,975	470,557	183,749	3,540,783	19.3
1949	3,540,783	386,776	198,547	3,729,012	18.8
1950	3,729,012	766,062	227,411	4,267,663	18.8
1951	4,267,663	723,991	267,052	4,724,602	17.7
1952	4,724,602	556,838	284,789	4,996,651	17.5
1953	4,996,651	743,969	302,698	5,437,922	18.0
1954	5,437,922	107,350	300,815	5,244,457	17.4
1955	5,244,457	514,508	320,400	5,438,565	17.0
1956	5,438,565	809,820	346,053	5,902,332	17.1
1957	5,902,332	137,392	352,364	5,687,360	16.1
1958	5,687,360	858,206	341,548	6,204,018	18.2
1959	6,204,018	703,444	385,154	6,522,308	16.9
1960	6,522,308	725,130	431,379	6,816,059	15.8
1961	6,816,059	694,686	461,649	7,049,096	15.3
1962	7,049,096	732,549	470,128	7,311,517	15.6
1963	7,311,517	878,120	515,659	7,673,978	14.9
1964	7,673,978	608,744	536,090	7,746,632	14.4
1965	7,746,632	832,312	555,410	8,023,534	14.4
1966	8,023,534	894,116	588,684	8,328,966	14.1
1967	8,328,966	929,758	644,493	8,614,231	13.4
1968	8,614,231	685,659	701,782	8,598,108	12.2
1969	8,598,108	281,028	735,962	8,143,174	11.1
1970	8,143,174	307,579	747,812	7,702,941	10.3
1971	7,702,941	347,720	746,434	7,304,227	9.8
1972	7,304,227	238,273	755,941	6,786,559	9.0
1973	6,786,559	408,979	740,831	6,454,707	8.7
1974	6,454,707	619,841	724,099	6,350,449	8.8
1975	6,350,449	618,504	701,123	6,267,830	8.9
1976	6,267,830	834,766	700,629	6,401,967	9.1
1977	6,401,967	291,171	698,773	5,994,365	8.6
1978	5,994,365	595,666	664,179	5,925,852	8.9
1979(1)	6,772,000	570,000	727,000	6,615,000	9.1
1980	6,615,000	844,000	731,000	6,728,000	9.1
1981	6,728,000	1,081,000	741,000	7,068,000	9.3
1982	7,068,000	874,000	721,000	7,221,000	9.9
1983	7,221,000	1,405,000	725,000	7,901,000	10.9
1984	7,901,000	518,000	776,000	7,643,000	9.8

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(1)Figures beginning with 1979 are from the Department of Energy data, using a different methodology from prior data. Therefore, year-end 1978 and start of year 1979 data are not the same.

Source: American Gas Association through 1978.
Department of Energy beginning in 1979.

THE RESERVES OF U.S. NATURAL GAS LIQUIDS
(Thousands of Barrels)

Year	Proved Reserves at Start of Year	Reserve Revisions Extensions & Discoveries	Production	Proved Reserves at Year-End	Indicated Years Supply at Year-End
1985	7,643,000	1,054,000	753,000	7,944,000	10.5
1986	7,944,000	959,000	738,000	8,165,000	11.1
1987	8,165,000	729,000	747,000	8,147,000	10.9

Source: DOE/EIA--U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual.

WORLD MARKETED PRODUCTION OF NATURAL GAS BY AREA
(Billions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1950	6,282.1	71.7	260.0	6,613.8	0	0	55.4	33.2	6,702.4	N.A.	6,702.4
1951	7,457.4	84.0	201.4	7,742.7	0	0	72.7	52.0	7,867.4	255.3	8,122.7
1952	8,013.5	93.7	223.5	8,330.7	0	0	85.2	61.9	8,477.8	305.4	8,783.2
1953	8,396.9	106.7	255.0	8,758.7	0	.1	99.6	100.4	8,958.8	503.6	9,462.4
1954	8,742.5	127.6	273.1	9,143.3	0	.3	106.3	131.3	9,381.1	538.3	9,919.4
1955	9,405.4	150.8	356.2	9,912.3	0	.5	82.3	189.8	10,184.9	524.9	10,709.8
1956	10,081.9	169.2	368.2	10,619.2	15.6	.5	101.8	227.5	10,964.6	656.9	11,621.5
1957	10,680.3	220.0	458.6	11,358.9	25.6	.4	114.2	251.8	11,750.9	926.2	12,677.0
1958	11,030.3	337.8	616.1	11,984.2	26.3	4.4	119.7	267.5	12,402.1	1,379.7	13,781.7
1959	12,046.1	417.3	714.0	13,177.4	44.5	14.4	133.3	346.9	13,716.6	1,688.0	15,404.6
1960	12,771.0	523.0	775.9	14,069.9	57.3	5.8	157.8	433.8	14,724.7	2,191.9	16,916.6
1961	13,254.0	655.7	864.1	14,773.8	172.1	20.4	170.7	502.2	15,639.2	2,748.4	18,387.6
1962	13,876.6	946.7	956.4	15,779.8	173.3	31.3	193.7	548.4	16,726.4	3,366.0	20,092.4
1963	14,666.6	1,111.5	702.5	16,480.5	149.2	16.0	135.2	560.0	17,340.8	3,678.2	21,018.9
1964	15,462.1	1,327.7	721.6	17,511.4	162.6	33.2	155.3	608.9	18,471.4	4,397.1	22,868.5
1965	16,039.8	1,442.4	779.9	18,262.2	171.2	67.9	168.3	671.1	19,340.6	5,139.6	24,480.2
1966	17,206.6	1,341.8	828.8	19,377.2	193.1	82.1	198.3	789.9	20,640.7	5,735.5	26,394.2
1967	18,171.3	1,471.7	883.5	20,526.5	229.3	85.0	215.3	1,018.6	22,074.8	6,323.0	28,397.8
1968	19,322.4	1,692.3	1,061.6	22,076.3	388.2	96.5	330.3	1,439.1	24,330.3	7,072.9	31,403.1
1969	20,698.2	1,977.8	1,143.3	23,819.4	441.7	113.8	431.1	2,009.7	26,815.7	7,569.4	34,385.1
1970	21,920.6	2,277.1	1,276.6	25,474.4	454.1	122.2	525.3	2,789.0	29,365.0	8,728.9	38,094.0
1971	22,493.0	2,499.0	1,362.6	26,354.7	698.0	522.6	559.8	3,580.7	31,715.8	9,472.6	41,188.4
1972	22,531.7	2,913.5	1,456.6	26,901.8	905.6	471.8	606.0	4,501.1	33,386.4	10,127.5	43,513.9
1973	22,647.5	3,119.5	1,615.8	27,382.8	1,276.9	585.8	775.9	5,148.0	35,169.4	10,958.4	46,127.8
1974	21,600.5	3,045.5	1,659.1	26,305.1	1,423.4	607.7	880.9	5,837.0	35,054.2	12,117.3	47,171.5

N.A. Not Available

Source: 1950-1967: U.S. Bureau of Mines, Minerals Yearbook, Annual
1968-1974: U.S. Bureau of Mines, World Natural Gas

Section XIII
Table 4a

WORLD MARKETED PRODUCTION OF NATURAL GAS BY AREA
(Billions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1975	20,108.7	3,075.7	1,735.1	24,919.4	1,436.2	670.4	938.4	5,966.7	33,931.1	13,276.3	47,207.3
1976	19,952.4	3,067.4	1,722.1	24,741.9	1,492.8	905.8	1,173.9	6,343.6	34,657.9	14,801.3	49,459.2
1977	20,025.5	3,230.7	1,865.7	25,121.9	1,507.0	919.5	1,329.0	6,502.5	35,379.8	14,720.3	50,100.1
1978	19,974.0	3,128.1	2,012.9	25,115.0	1,579.5	1,117.4	1,469.2	6,649.9	35,930.9	15,818.4	51,749.3
1979	20,471.3	3,646.5	2,610.0	26,727.8	1,624.7	1,027.9	1,827.9	6,866.8	38,075.1	19,591.4	57,666.5
1980	20,179.7	2,668.3	3,297.5	26,344.6	1,221.3	884.7	2,558.4	6,668.7	37,677.7	21,069.9	58,747.6
1981	19,955.8	2,623.0	3,227.0	26,027.7	1,542.0	1,947.0	2,765.0	6,906.0	39,187.7	19,210.0	58,397.7
1982	18,519.7	2,546.1	3,071.5	24,137.3	1,799.7	1,168.9	2,176.6	6,142.1	35,424.6	20,258.0	55,682.6
1983	16,822.1	2,414.1	3,340.5	22,576.7	1,633.0	1,143.8	2,187.7	6,383.4	33,924.6	21,383.0	55,307.6
1984	18,229.6	2,651.8	3,451.8	24,333.2	1,533.4	1,629.1	2,530.7	6,795.4	36,821.8	23,272.1	60,093.9
1985	17,198.0	3,196.3	3,445.3	23,849.6	1,668.3	1,720.7	2,924.5	6,827.2	36,990.3	25,453.4	62,443.7
1986	16,791.0	3,168.3	3,413.6	23,372.9	1,822.8	1,661.8	3,320.9	6,519.6	36,698.0	27,088.2	63,786.2
1987	17,150.0	3,472.7	3,354.5	23,977.2	2,624.1	2,025.7	3,797.6	7,043.9	39,468.5	28,742.5	68,211.0

Source: 1975-1978: U.S. Energy Information Administration, World Natural Gas, Annuals
1979-1987: U.S. Energy Information Administration, United States only; Rest of World, Oil and Gas Journal

SALIENT STATISTICS OF NATURAL GAS IN THE U.S.
(Millions of Cubic Feet)

Year	Marketed Production	Exports	Consumption	Imports	Wellhead Value (m $)	Total Withdrawn from Storage	Stored	Lost in Transmission	Vented and Flared
1947	4,582,173	18,149	4,426,544	-	$274,709	86,643	96,316	127,807	1,067,938
1948	5,148,020	18,704	4,945,149	-	333,173	79,035	136,406	126,796	810,178
1949	5,419,736	20,054	5,195,484	-	344,034	106,368	172,051	138,515	853,884
1950	6,282,060	25,727	6,026,404	-	408,521	175,260	229,752	175,437	801,044
1951	7,457,359	24,163	7,102,562	-	542,964	209,428	347,690	192,372	793,186
1952	8,013,457	27,456	7,613,478	7,807	623,649	221,909	398,593	203,646	848,608
1953	8,396,916	28,322	7,979,338	9,225	774,966	246,802	404,838	240,445	810,276
1954	8,742,546	28,726	8,402,852	6,847	882,501	330,177	432,283	215,709	723,567
1955	9,405,351	31,029	9,070,343	10,888	978,357	437,251	505,185	246,933	773,639
1956	10,081,923	35,963	9,706,878	10,380	1,083,812	452,762	589,232	212,992	727,004
1957	10,680,258	41,655	10,279,775	37,941	1,201,759	480,981	672,377	205,373	809,148
1958	11,030,298	38,719	10,760,698	135,797	1,317,492	621,091	704,172	283,597	633,412
1959	12,046,115	18,413	11,819,638	133,990	1,556,800	668,743	787,485	223,312	571,048
1960	12,771,038	11,332	12,509,427	155,646	1,789,970	712,658	844,352	274,231	562,877
1961	13,182,029	10,689	13,010,654	217,671	1,996,241	694,258	839,083	233,532	523,533
1962	13,801,244	15,728	13,814,678	399,353	2,145,301	849,695	935,712	284,174	425,629
1963	14,666,559	16,865	14,560,953	430,997	2,328,030	911,741	1,041,802	362,677	383,408
1964	15,462,143	19,497	15,451,979	440,918	2,387,689	880,498	1,099,302	302,781	339,996
1965	16,039,753	26,132	16,033,189	456,394	2,494,542	959,865	1,077,980	318,711	319,143
1966	17,206,628	14,639	17,191,711	479,780	2,702,759	1,141,614	1,210,469	401,203	374,695
1967	18,171,325	81,614	18,172,894	564,226	2,898,741	1,132,534	1,317,363	296,214	489,877
1968	19,322,400	93,745	19,459,939	651,885	3,168,688	1,329,536	1,425,075	325,062	516,508
1969	20,698,240	51,304	20,922,800	726,951	3,455,615	1,379,488	1,498,988	331,587	525,750

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 5a

SALIENT STATISTICS OF NATURAL GAS IN THE U.S.
(Millions of Cubic Feet)

Year	Marketed Production	Exports	Consumption	Imports	Total Wellhead Value (m $)	Withdrawn from Storage	Stored	Lost in Transmission	Vented and Flared
1970	21,920,642	69,813	22,045,799	820,780	$3,745,680	1,458,607	1,856,767	227,650	489,460
1971	22,493,012	80,212	22,676,581	934,548	4,085,482	1,507,630	1,839,398	338,999	284,561
1972	22,531,698	78,013	23,009,445	1,019,496	4,180,462	1,757,218	1,892,952	328,002	248,119
1973	22,647,549	77,169	22,965,914	1,032,901	4,894,072	1,532,820	1,974,324	195,863	248,292
1974	21,600,522	76,789	22,110,623	959,284	6,573,402	1,700,546	1,784,209	288,731	169,381
1975	20,108,661	72,675	20,409,875	953,008	8,945,062	1,759,565	2,103,619	235,065	133,913
1976	19,952,438	64,711	20,800,582	963,768	11,571,776	1,921,017	1,755,690	216,240	131,930
1977	20,025,463	55,626	19,520,581	1,011,001	15,833,719	1,749,884	2,306,515	41,063	136,807
1978	19,974,033	52,532	19,627,478	965,545	18,084,914	2,157,765	2,278,002	287,201	153,350
1979	20,471,260	55,673	20,240,761	1,253,383	24,113,634	2,047,000	2,295,034	372,330	167,019
1980	20,179,724	48,731	19,877,293	984,767	32,043,704	1,909,902	1,896,284	639,559	125,451
1981	19,955,8[illegible]3	59,372	19,403,858	903,949	39,551,253	1,886,940	2,179,683	500,501	98,017
1982	18,519,675	51,728	18,001,055	933,336	45,496,765	2,093,644	2,399,355	474,731	93,365
1983	16,822,144	54,638	16,834,914	919,752	43,614,369	2,142,027	1,700,426	642,059	94,962
1984	18,229,638	54,753	17,950,528	843,060	48,404,611	2,064,292	2,252,347	142,607	107,913
1985	17,197,999	57,095	17,280,943	949,372	43,182,598	2,359,405	2,127,932	354,065	94,778
1986	16,790,910	61,271	16,221,296	750,130	32,607,825	1,811,697	1,952,103	426,726	97,633

(1) Also includes changes in above ground storage and gas unaccounted for.

Source: U.S. Energy Information Administration, Natural Gas Annuals

Section XIII
Table 6

U.S. IMPORTS OF NATURAL GAS BY SOURCE
(Billions of Cubic Feet)

Year	Canada	Mexico	Algeria(3)	Total Imports	U.S. Natural Gas Consumption
1968	604	47	NA	652	19,460
1969	680	47	NA	727	20,923
1970	779(1)	41	(2)	821	22,046
1971	911(1)	21	1	935	22,677
1972	1,009(1)	8	2	1,019	23,101
1973	1,027(1)	2	3	1,033	22,049
1974	959	(2)	0	959	22,231
1975	948	0	5	953	19,535
1976	954	0	10	964	19,946
1977	997	2	11	1,011	19,521
1978	881	0	84	966	19,627
1979	1,001	0	253	1,253	20,241
1980	797	102	86	985	19,877
1981	762(1)	105	37	904	19,404
1982	783	95	55	933	18,001
1983	712	75	131	918	16,835
1984	755	52	36	843	17,951
1985	926	0	24	950	17,281
1986	748	0	0	749(4)	16,003
1987	1,007	0	0	1,007	16,680

(1) Includes approximately 1 billion cubic feet of liquefied natural gas in 1970, 2 billion cubic feet in 1971, 0.2 billion cubic feet in 1972, 0.7 billion cubic feet in 1973, and 0.6 billion cubic feet in 1981.
(2) Less than one-half unit.
(3) Liquefied natural gas.
(4) Includes a small amount from Indonesia.

Source: U.S. Energy Information Administration, 1968-1977: World Natural Gas Annuals
1978-1981: U.S. Imports and Exports of Natural Gas
1982-1987: Natural Gas Monthly, May issue

Section XIII
Table 7

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1975	Nation	1976
1. U.S.S.R.	810,000	1. U.S.S.R	800,000
2. Iran	330,000	2. Iran	329,500
3. United States	237,132	3. United States	228,200
4. Algeria	229,000	4. Algeria	126,000
5. United Arab Emirates(1)	200,000	5. Saudi Arabia	103,000
6. Netherlands	94,800	6. Netherlands	70,000
7. Canada	56,708	7. Canada	56,975
8. Saudi Arabia	55,000	8. United Kingdom	50,000
9. United Kingdom	50,000	9. Nigeria	44,300
10. Nigeria	45,500	10. Venezuela	42,000
11. Venezuela	43,000	11. Australia	32,500
12. Australia	38,000	12. Kuwait	31,800
13. Kuwait	32,000	13. Libya	26,300
14. Iraq	27,500	14. Norway	25,000
15. Libya	26,500	15. People's Republic of China	25,000
16. People's Republic of China	25,000	16. United Arab Emirates(1)	20,000
17. Norway	24,700	17. Pakistan	16,400
18. Brunei-Malaysia	22,000	18. Indonesia	15,000
19. Indonesia	15,000	19. Malaysia	15,000
20. Mexico	15,000	20. Bolivia	10,800
Total Free World	1,700,404	Total Free World	1,413,897
Total World	2,546,404	Total World	2,248,897

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(1) Prior to 1972 figures reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai and Sharjah which formed the United Arab Emirates.

Source: United States, American Gas Association, Committee on Natural Gas Reserves
Canada, Canadian Petroleum Association
Rest of the World, The Oil & Gas Journal, "World-Wide Oil" Issues

Section XIII
Table 7a

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1977		Nation	1978
1.	U.S.S.R.	918,000	1.	U.S.S.R	920,000
2.	Iran	330,000	2.	Iran	500,000
3.	United States	216,026	3.	United States	208,878
4.	Algeria	125,800	4.	Algeria	125,000
5.	Saudi Arabia	86,000	5.	Saudi Arabia	85,000
6.	Netherlands	61,900	6.	Netherlands	60,000
7.	Canada	58,282	7.	Canada	58,000
8.	Nigeria	44,000	8.	Nigeria	43,000
9.	Venezuela	40,700	9.	Venezuela	41,000
10.	Australia	32,300	10.	Qatar	40,000
11.	Kuwait	31,700	11.	Australia	32,000
12.	United Kingdom	30,000	12.	Kuwait	31,500
13.	Qatar	27,500	13.	Mexico	30,000
14.	Iraq	27,000	14.	United Kingdom	29,000
15.	Libya	25,800	15.	Iraq	28,000
16.	People's Republic of China	25,000	16.	Libya	25,700
17.	Indonesia	24,000	17.	People's Republic of China	25,000
18.	Norway	18,500	18.	Indonesia	24,000
19.	Pakistan	15,820	19.	United Arab Emirates	20,000
20.	Malaysia	15,000	20.	Norway	20,000
	Total Free World	1,161,905		Total Free World	1,563,437
	Total World	2,114,905		Total World	2,518,437

Source: United States, American Gas Association, Committee on Natural Gas Reserves
Canada, Canadian Petroleum Association
Rest of the World, The Oil & Gas Journal, "World-Wide Oil" Issues

Section XIII
Table 7b

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1979		Nation	1980
1.	U.S.S.R.	910,000	1.	U.S.S.R.	900,000
2.	Iran	500,000	2.	Iran	490,000
3.	United States	200,302	3.	United States	194,917
4.	Algeria	105,000	4.	Algeria	132,000
5.	Saudi Arabia	93,900	5.	Saudi Arabia	93,230
6.	Netherlands	62,000	6.	Canada	85,500
7.	Canada	59,000	7.	Qatar	60,000
8.	Nigeria	42,000	8.	Netherlands	59,500
9.	Venezuela	41,000	9.	Mexico	59,000
10.	Qatar	40,000	10.	Venezuela	42,800
11.	Mexico	32,000	11.	Nigeria	41,400
12.	Kuwait	31,300	12.	Kuwait	31,000
13.	Australia	31,000	13.	Australia	31,000
14.	Iraq	27,800	14.	Iraq	27,500
15.	United Kingdom	27,000	15.	United Kingdom	25,000
16.	People's Republic of China	25,000	16.	People's Republic of China	25,000
17.	Libya	24,200	17.	Libya	24,000
18.	Indonesia	24,000	18.	Indonesia	24,000
19.	Norway	24,000	19.	Norway	23,500
20.	United Arab Emirates	21,600	20.	United Arab Emirates	20,500
	Total Free World	1,552,312		Total Free World	1,639,158
	Total World	2,497,312		Total World	2,574,158

Source: United States, American Gas Association
Rest of World, Oil and Gas Journal

Section XIII
Table 7c

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1981	Nation	1982	Nation	1983
1. U.S.S.R.	920,000	1. U.S.S.R.	1,160,000	1. U.S.S.R.	1,240,000
2. Iran	485,000	2. Iran	484,000	2. Iran	482,600
3. United States	199,021	3. United States	201,730	3. United States	201,512
4. Algeria	131,500	4. Algeria	130,900	4. Saudi Arabia	117,000
5. Saudi Arabia	110,000	5. Saudi Arabia	114,000	5. Algeria	111,250
6. Canada	87,300	6. Canada	89,900	6. Canada	97,000
7. Mexico	64,500	7. Mexico	75,350	7. Mexico	75,850
8. Netherlands	62,000	8. Qatar	60,000	8. Qatar	62,000
9. Qatar	60,000	9. Netherlands	55,700	9. Norway	58,000
10. Norway	42,700	10. Norway	49,370	10. Venezuela	54,079
11. Venezuela	42,000	11. Venezuela	47,000	11. Netherlands	51,920
12. Nigeria	41,000	12. Nigeria	40,500	12. Malaysia	34,000
13. Kuwait	30,800	13. Kuwait	30,500	13. Nigeria	32,400
14. Australia	30,000	14. Indonesia	27,400	14. Kuwait	29,900
15. Iraq	27,450	15. Iraq	27,300	15. Indonesia	29,600
16. United Kingdom	24,800	16. United Kingdom	26,000	16. Iraq	28,800
17. People's Republic		17. People's Republic		17. United Kingdon	25,400
of China	24,500	of China	24,400	18. Argentina	25,200
18. Libya	23,800	18. Argentina	23,400	19. Libya	21,500
19. Indonesia	23,500	19. Libya	23,200	20. Abu Dhabi	19,260
20. Argentina	22,000	20. Abu Dhabi	19,500		
Total Free World	1,692,622	Total Free World	1,720,376	Total Free World	1,747,239
Total World	2,646,522	Total World	2,915,076	Total World	3,031,039

Source: 1981-1983: United States, Department of Energy
Rest of World, Oil and Gas Journal

Section XIII
Table 7d

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1984	Nation	1985	Nation	1986
1. U.S.S.R.	1,400,000	1. U.S.S.R.	1,450,000	1. U.S.S.R.	1,500,000
2. Iran	480,000	2. Iran	478,600	2. Iran	470,000
3. United States	200,247	3. United States	197,463	3. United States	193,369
4. Saudi Arabia	121,000	4. Qatar	150,000	4. Qatar	148,000
5. Algeria	110,180	5. Saudi Arabia	123,270	5. Saudi Arabia	121,000
6. Canada	90,500	6. Algeria	109,100	6. Algeria	107,080
7. Mexico	75,352	7. Canada	92,300	7. Norway	104,000
8. Qatar	62,000	8. Norway	89,000	8. Canada	99,700
9. Norway	58,800	9. Mexico	77,000	9. Mexico	76,954
10. Venezuela	54,546	10. Netherlands	68,482	10. Netherlands	67,070
11. Netherlands	50,050	11. Venezuela	55,367	11. Venezuela	59,067
12. Malaysia	48,000	12. Malaysia	50,000	12. Malaysia	52,700
13. Nigeria	34,800	13. Indonesia	40,000	13. Nigeria	47,000
14. Kuwait	31,000	14. Nigeria	35,600	14. Indonesia	35,600
15. China	30,300	15. Kuwait	32,500	15. United Kingdom	33,000
16. Indonesia	30,200	16. China	30,900	16. Kuwait	32,500
17. Iraq	29,000	17. Iraq	28,800	17. China	30,000
18. United Kingdom	25,100	18. United Kingdom	27,800	18. Iraq	29,000
19. Argentina	24,420	19. Argentina	24,628	19. Argentina	23,588
20. Libya	21,350	20. Libya	21,200	20. Libya	21,390
TOTAL FREE WORLD	1,755,397	TOTAL FREE WORLD	1,904,088	TOTAL FREE WORLD	1,934,429
TOTAL WORLD	3,202,197	TOTAL WORLD	3,401,488	TOTAL WORLD	3,480,429

Source: 1984-1986: United States, U.S. Department of Energy
Rest of World, Oil and Gas Journal, "Worldwide Report" issue

Section XIII
Table 7e

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1987		Nation	1988
1.	U.S.S.R.	1,550,000	1.	U.S.S.R.	1,450,000
2.	Iran	450,000	2.	Iran	489,400
3.	United States	191,586	3.	United States	187,200
4.	Qatar	152,000	4.	Abu Dhabi	183,500
5.	Saudi Arabia	123,990	5.	Qatar	156,700
6.	Algeria	106,000	6.	Saudi Arabia	139,900
7.	Norway	103,180	7.	Norway	105,940
8.	Canada	99,600	8.	Algeria	105,900
9.	Abu Dhabi	90,000	9.	Canada	98,000
10.	Mexico	76,500	10.	Venezuela	95,000
11.	Netherlands	70,400	11.	Nigeria	84,000
12.	Venezuela	59,000	12.	Mexico	76,530
13.	Malaysia	49,440	13.	Indonesia	73,000
14.	Indonesia	49,440	14.	Netherlands	64,100
15.	Nigeria	47,000	15.	Malaysia	52,200
16.	Kuwait	35,000	16.	Kuwait	36,400
17.	United Kingdom	33,400	17.	China	30,700
18.	China	30,000	18.	Iraq	26,300
19.	Iraq	28,000	19.	Libya	25,700
20.	Argentina	23,000	20.	Argentina	23,600
	TOTAL FREE WORLD	2,036,366		TOTAL FREE WORLD	2,287,500
	TOTAL WORLD	3,632,166		TOTAL WORLD	3,797,500

Source: U.S.--D.O.E./E.I.A., U.S. Crude(Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.
Rest of World--Oil and Gas Journal, "Worldwide(Report" issue(

Section XIII
Table 8

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1974(1)(2)	Nation	1975(1)(2)	Nation	1976(1)(2)
1. United States	21,600.5	1. United States	20,108.7	1. United States	19,952.4
2. U.S.S.R.	9,201.3	2. U.S.S.R.	10,205.9	2. U.S.S.R.	11,331.3
3. Canada	3,045.5	3. Netherlands	3,208.4	3. Netherlands	3,542.7
4. Netherlands	2,956.7	4. Canada	3,075.7	4. Canada	3,157.2
5. United Kingdom	1,230.0	5. People's Republic of China	1,400.0	5. Iran	1,699.6
6. People's Republic of China	1,200.0	6. United Kingdom	1,208.2	6. People's Republic of China	1,433.7
7. Romania	1,011.5	7. Romania	953.5	7. United Kingdom	1,202.3
8. Iran	787.4	8. Iran	771.1	8. Romania	854.6
9. West Germany	713.2	9. West Germany	639.4	9. Mexico	790.8
10. Mexico	560.9	10. Mexico	583.9	10. Nigeria	632.6
11. Italy	540.4	11. Italy	514.3	11. Italy	562.1
12. Venezuela	476.0	12. Venezuela	450.3	12. West Germany	544.0
13. Libya	345.2	13. Libya	382.6	13. Libya	439.2
14. East Germany	273.1	14. East Germany	280.0	14. Venezuela	396.0
15. France	269.4	15. Argentina	271.6	15. Argentina	280.2
16. Argentina	255.7	16. France	259.8	16. Algeria	256.9
17. Saudi Arabia	219.0	17. Poland	210.6	17. France	250.7
18. Poland	202.7	18. Algeria	210.0	18. Indonesia	248.6
19. Algeria	198.5	19. Saudi Arabia	200.0	19. Australia	209.3
20. Kuwait	186.9	20. Brunei	186.5	20. Chile	175.8
Total Free World	35,054.2	Total Free World	33,931.1	Total Free World	36,006.5
Total World	47,171.5	Total World	47,207.3	Total World	50,367.1

(1) Comprises all gas collected and utilized as fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: 1974-1975: U.S. Bureau of Mines, World Natural Gas, May 27, 1977
1976: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

Section XIII
Table 8a

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

	Nation	1977(1)(2)		Nation	1978(1)(2)		Nation	1979(1)(2)
1.	United States	20,337.5	1.	United States	19,974.0	1.	United States	20,471.3
2.	U.S.S.R.	12,395.2	2.	U.S.S.R.	13,131.6	2.	U.S.S.R.	14,367.1
3.	Canada	3,301.4	3.	Canada	3,133.1	3.	Canada	3,646.5
4.	Netherlands	2,932.5	4.	People's Republic of China	2,352.2	4.	People's Republic of China	2,832.7
5.	People's Republic of China	1,787.0	5.	Iran	1,746.9	5.	Netherlands	2,717.8
6.	Iran	1,756.1	6.	Netherlands	1,624.5	6.	United Kingdom	1,965.7
7.	United Kingdom	1,499.9	7.	United Kingdom	1,262.4	7.	Romania	1,210.5
8.	Romania	1,005.5	8.	Romania	1,211.6	8.	Mexico	974.9
9.	West Germany	907.7	9.	Mexico	887.5	9.	Iran	913.3
10.	Mexico	745.3	10.	West Germany	643.2	10.	West Germany	826.3
11.	Nigeria	717.4	11.	Nigeria	586.6	11.	Indonesia	816.3
12.	Libya	488.6	12.	Indonesia	565.8	12.	Italy	533.6
13.	Italy	448.6	13.	Italy	540.8	13.	Norway	414.9
14.	Venezuela	392.8	14.	Venezuela	401.4	14.	Venezuela	406.0
15.	Indonesia	351.9	15.	Libya	364.0	15.	Nigeria	365.6
16.	Algeria	284.5	16.	Norway	351.8	16.	Chile	306.4
17.	France	256.8	17.	Algeria	328.7	17.	Brunei-Malaysia	302.7
18.	Argentina	250.0	18.	Brunei-Malaysia	325.7	18.	Algeria	301.5
19.	Australia	236.7	19.	Chile	320.7	19.	Australia	254.1
20.	Chile	208.9	20.	Argentina	254.3	20.	Argentina	241.7
	Total Free World	35,393.2		Total Free World	35,272.8		Total Free World	38,075.1
	Total World	53,883.7		Total World	53,911.1		Total World	57,666.5

(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.

(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

Section XIII
Table 8b

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1980(1)(2)	Nation	1981(1)(2)	Nation	1982(1)(2)
1. United States	20,378.8	1. United States	20,177.7	1. United States	18,519.7
2. U.S.S.R.	15,355.5	2. U.S.S.R.	16,390.0	2. U.S.S.R.	17,685.3
3. People's Republic of China	3,469.0	3. Netherlands	3,054.0	3. Canada	2,546.1
4. Netherlands	2,799.6	4. Canada	2,623.0	4. Netherlands	2,521.7
5. Canada	2,668.3	5. Mexico	1,486.0	5. Mexico	1,549.7
6. United Kingdom	1,500.0	6. Romania	1,440.0	6. United Kingdom	1,276.1
7. Mexico	1,190.5	7. United Kingdom	1,427.0	7. Romania	1,150.0
8. Romania	1,176.4	8. Algeria	1,149.0	8. Norway	861.9
9. Indonesia	1,028.4	9. Indonesia	1,075.0	9 Algeria	828.5
10. West Germany	738.6	10. Norway	923.0	10. Saudi Arabia	591.8
11. Norway	705.2	11. Libya	674.0	11. West Germany	585.3
12. Pakistan	600.0	12. West Germany	636.0	12. Indonesia	568.9
13. Italy	524.6	13. Venezuela	602.0	13. Venezuela	527.2
14. Venezuela	518.0	14. Pakistan	600.0	14. Italy	503.6
15. Algeria	517.0	15. Italy	500.0	15. Australia	415.8
16. Saudi Arabia	310.2	16. People's Republic of China	459.0	16. Argentina	386.2
17. Argentina	296.9	17. Saudi Arabia	435.0	17. Iran	381.5
18. Iran	292.0	18. Australia	377.0	18. China	363.7
19. Kuwait	291.3	19. Kuwait	340.0	19. France	332.6
20. Brunei	282.0	20. Argentina	330.0	20. Pakistan	315.3
Total Free World	37,677.7	Total Free World	39,187.7	Total Free World	35,424.6
Total World	58,747.7	Total World	58,397.7	Total World	55,682.6

(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

Section XIII
Table 8c

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1983(1)(2)	Nation	1984(1)(2)	Nation	1985(1)(2)
1. U.S.S.R.	18,903.0	1. U.S.S.R.	20,721.1	1. U.S.S.R.	22,697.9
2. United States	16,822.1	2. United States	18,229.6	2. United States	17,198.0
3. Netherlands	2,678.9	3. Netherlands	2,677.5	3. Canada	3,350.6
4. Canada	2,414.1	4. Canada	2,651.8	4. Netherlands	2,858.8
5. Mexico	1,479.5	5. United Kingdom	1,423.3	5. United Kingdom	1,497.1
6. United Kingdom	1,395.3	6. Mexico	1,373.3	6. Algeria	1,320.0
7. Romania	1,200.0	7. Algeria	1,260.0	7. Mexico	1,312.2
8. Norway	861.4	8. Romania	1,240.0	8. Romania	1,200.0
9. Algeria	707.0	9. Norway	922.6	9. Indonesia	1,056.0
10. West Germany	605.2	10. Indonesia	732.0	10. Norway	902.2
11. Venezuela	559.2	11. Argentina	653.2	11. Argentina	667.3
12. Argentina	549.6	12. West Germany	648.2	12. Venezuela	609.6
13. Iran	500.2	13. Italy	638.9	13. West Germany	608.1
14. Indonesia	481.8	14. Venezuela	609.6	14. China	600.0
15. Italy	450.1	15. Australia	444.4	15. Iran	480.0
16. Australia	423.5	16. China	420.0	16. Australia	473.7
17. Saudi Arabia	381.5	17. France	373.4	17. Italy	448.9
18. China	371.0	18. Iran	360.0	18. Pakistan	355.3
19. Pakistan	341.4	19. Pakistan	355.2	19. United Arab Emirates	336.0
20. Brunei	316.3	20. Brunei	312.0	20. Brunei	300.0
Total Free World	33,924.6	Total Free World	36,821.8	Total Free World	36,990.3
Total World	55,307.6	Total World	60,093.9	Total World	62,443.7

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(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.

(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

WORLD NATURAL GAS PRODUCTION--TWENTY LEADING NATIONS
(Billions of Cubic Feet)

	Nation	1986(1)(2)		Nation	1987(1)(2)
1.	U.S.S.R.	24,215.8	1.	U.S.S.R.	25,673.8
2.	United States	16,791.0	2.	United States	17,150.0
3.	Canada	3,168.3	3.	Canada	3,472.7
4.	Netherlands	2,623.3	4.	Netherlands	2,731.2
5.	United Kingdom	1,634.0	5.	United Kingdom	1,655.3
6.	Mexico	1,252.3	6.	Algeria	1,471.6
7.	Algeria	1,238.3	7.	Mexico	1,277.4
8.	Romania	1,210.2	8.	Romania	1,267.8
9.	Indonesia	1,559.9	9.	Indonesia	1,234.8
10.	Norway	906.2	10.	Norway	994.1
11.	Argentina	661.8	11.	Saudi Arabia	740.9
12.	China	646.0	12.	Italy	697.2
13.	Venezuela	615.1	13.	Venezuela	680.3
14.	West Germany	545.4	14.	Iran	670.7
15.	Italy	527.3	15.	Argentina	659.6
16.	Australia	524.1	16.	West Germany	658.9
17.	Iran	489.3	17.	United Arab Emirates	575.0
18.	Pakistan	390.3	18.	Australia	532.8
19.	United Arab Emirates	362.1	19.	Malaysia	460.9
20	Saudi Arabia	328.7	20.	Pakistan	419.8
Total Free World		36,698.0	Total Free World		39,468.5
Total World		63,786.2	Total World		68,211.0

(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; Other nations, Oil and Gas Journal.

Section XIII
Table 9

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
AL	-	-	-	2	1	4	41	87	282	42	190	323
AK	-	-	-	-	-	-	-	-	-	--	--	50
AZ	-	-	-	-	-	-	-	-	15	21	--	--
AR	50,630	53,946	47,788	48,047	44,656	42,325	41,510	33,471	32,123	30,162	31,327	32,890
CA	560,510	570,954	550,903	558,398	566,751	517,450	531,346	507,289	538,178	504,458	492,338	465,582
CO	8,392	8,967	8,490	11,168	14,128	34,260	28,509	45,705	49,152	54,205	95,259	82,464
FL	8	27	39	8	10	15	34	35	36	35	34	35
IL	17,023	14,062	12,391	13,285	11,425	10,183	9,282	9,475	8,033	6,177	9,647	12,983
IN	877	553	334	956	845	836	701	735	1,226	791	671	378
KS	209,321	245,189	294,078	364,024	417,538	412,544	420,607	412,369	471,041	526,091	586,690	561,816
KY	96,459	70,095	51,851	73,316	76,097	73,427	71,405	72,713	73,214	73,687	70,024	72,248
LA	581,398	686,061	732,845	831,771	1,054,199	1,237,143	1,293,644	1,399,222	1,680,032	1,886,302	2,078,901	2,451,587
MD	-	-	-	373	3,422	2,372	1,408	1,394	3,116	4,619	4,649	4,266
MI	18,812	14,981	14,753	11,250	11,194	9,052	7,774	6,962	8,300	10,911	9,122	14,243
MS	40,037	59,899	68,062	114,153	158,845	174,100	154,254	140,448	163,167	185,137	169,967	160,143
MO	38	27	24	21	14	16	15	16	15	12	12	-
MT	34,282	36,551	35,291	39,186	36,424	28,714	27,889	30,252	28,255	25,847	28,638	27,989
NE	-	-	-	17	3,895	5,568	6,748	6,801	12,515	13,541	14,249	11,405
NM	142,740	194,749	204,961	212,909	300,169	359,377	399,086	449,346	540,664	626,340	723,004	761,446
NY	4,600	4,705	3,693	3,336	3,214	3,627	2,347	2,590	3,637	4,098	2,869	2,808
ND	442	643	533	608	456	369	498	1,093	5,256	11,725	15,450	17,325
OH	68,946	65,619	46,512	43,163	38,879	30,993	37,542	28,824	33,756	25,368	30,384	31,786
OK	419,010	480,573	435,262	482,360	538,756	554,033	599,955	616,355	614,976	678,603	719,794	696,504
PA	91,971	87,578	84,739	91,137	128,715	108,684	105,558	145,934	99,172	104,508	101,801	95,869
SD	6	2	1	-	7	6	5	7	-	-	-	-
TN	80	127	83	132	132	107	89	89	39	45	38	54
TX	1,992,704	2,289,923	2,588,921	3,126,402	3,781,136	4,147,805	4,383,158	4,551,232	4,730,798	4,999,889	5,156,215	5,178,073
UT	6,040	6,610	6,126	3,950	3,733	3,006	7,075	16,024	17,163	17,268	16,824	19,247
VA	64	74	65	46	64	1,133	3,697	1,401	968	2,926	2,465	2,521
WV	192,233	203,681	181,176	189,980	191,146	180,995	186,477	191,601	212,403	204,717	202,440	204,581
WY	45,550	52,424	50,815	62,062	71,508	75,313	76,262	71,068	77,819	84,398	117,256	121,682
TOT	4,582,173	5,148,020	5,419,736	6,282,060	7,457,359	8,013,457	8,396,916	8,742,546	9,405,351	10,081,923	10,680,258	11,030,298

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 9a

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

State	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
AL	172	57	56	128	177	165	203	252	248	230	180	627
AK	133	246	631	2,184	4,498	6,238	7,255	11,267	14,438	17,343	50,864	111,576
AZ	-	-	-	230	1,334	2,014	3,106	3,161	1,255	881	1,136	1,101
AR	40,674	55,451	59,547	66,213	76,101	75,753	82,831	105,174	116,522	156,627	169,257	181,351
CA	485,655	517,535	556,241	564,220	646,486	660,444	660,384	689,607	681,080	714,893	677,689	649,117
CO	99,899	107,404	108,142	101,826	105,705	113,691	126,381	136,667	116,857	121,424	118,754	105,804
FL	34	30	29	29	35	40	107	212	123	108	50	--
IL	13,739	11,666	9,970	10,650	9,459	7,824	7,396	7,230	5,144	4,380	3,800	4,850
IN	484	342	382	284	286	199	239	215	198	234	171	153
KS	604,410	634,410	649,083	694,352	732,946	764,073	793,379	847,495	871,971	835,555	883,156	899,955
KY	73,504	75,329	70,937	70,241	74,634	76,940	78,976	76,536	89,168	89,024	81,304	77,892
LA	2,670,271	2,988,414	3,271,857	3,525,456	3,928,427	4,152,731	4,466,786	5,081,435	5,716,857	6,416,015	7,227,826	7,788,276
MD	4,373	4,065	3,578	2,472	1,633	1,373	408	696	621	864	978	813
MI	18,916	20,790	27,697	28,987	32,850	31,388	34,558	34,120	33,589	40,480	36,163	38,851
MS	162,095	172,478	172,543	170,271	176,807	180,428	166,825	156,652	139,497	135,051	131,234	126,031
MO	-	75	90	92	100	107	84	-	121	14	126	87
MT	30,743	33,418	33,901	29,955	30,026	25,051	28,105	30,685	25,866	19,313	41,229	42,705
NE	13,128	15,258	15,743	14,880	13,051	11,094	10,720	10,196	8,453	8,129	6,989	5,991
NM	739,660	798,928	789,662	804,612	808,377	873,947	937,205	998,076	1,067,510	1,164,182	1,138,133	1,138,980
NY	2,915	4,990	5,742	4,262	3,962	3,108	3,340	2,699	3,837	4,632	4,861	3,358
ND	17,915	19,483	20,100	25,155	32,798	34,512	35,652	46,585	40,462	41,023	33,587	34,889
OH	34,664	36,074	36,423	36,747	36,817	37,106	35,684	43,133	41,315	42,673	49,793	52,113
OK	811,508	824,266	892,697	1,060,717	1,233,883	1,316,201	1,320,995	1,351,225	1,412,952	1,390,884	1,523,715	1,594,943
PA	99,366	113,928	100,427	90,053	92,657	81,720	84,461	90,914	89,966	87,987	79,134	76,841
SD	-	-	-	-	-	-	-	-	-	-	-	-
TN	52	63	71	75	90	77	85	-	58	48	57	64
TX	5,718,993	5,892,704	5,963,605	6,080,210	6,205,034	6,490,202	6,636,555	6,953,790	7,188,900	7,495,414	7,853,199	8,357,716
UT	38,921	51,040	57,175	74,128	77,122	79,739	71,616	69,366	48,965	46,151	46,733	42,781
VA	2,280	2,227	2,466	2,499	2,085	1,600	3,152	4,249	3,818	3,389	2,846	2,805
WV	204,633	208,757	210,556	210,698	210,223	202,765	207,416	211,610	211,460	236,971	231,759	242,452
WY	156,978	181,610	194,674	204,996	209,060	231,613	235,849	243,381	240,074	248,481	303,517	338,520
TOT	12,046,115	12,771,038	13,254,025	13,876,622	14,746,663	15,462,143	16,039,753	17,206,628	18,171,325	19,322,400	20,698,240	21,920,642

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 9b

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
AL	355	3,644	11,271	27,865	37,814	41,427	57,227	85,599	85,815	105,527	119,334	75,003
AK	121,618	125,596	131,007	128,935	160,270	166,072	187,889	203,088	220,754	230,588	242,564	264,364
AZ	868	442	125	224	208	262	240	286	247	214	187	99
AR	172,154	166,522	157,529	123,975	116,237	109,533	104,096	106,792	109,452	111,808	92,986	124,611
CA	612,629	487,278	449,369	365,354	318,308	354,334	311,462	311,084	248,206	309,783	380,730	383,977
CO	108,537	116,949	137,725	144,629	171,629	183,972	188,792	183,693	191,239	190,814	199,146	209,892
FL	903	15,521	33,857	38,137	44,383	43,165	48,171	51,595	50,190	45,744	35,938	22,515
IL	498	1,194	1,638	1,436	1,440	1,556	1,003	1,159	1,585	1,574	1,295	1,162
IN	537	355	276	176	346	192	183	163	350	463	330	233
KS	885,144	889,268	893,118	886,782	843,625	829,170	781,289	854,484	797,762	735,035	640,114	429,597
KY	72,723	63,648	62,396	71,876	60,511	66,137	60,902	70,044	59,520	57,180	61,312	51,924
LA	8,081,907	7,972,678	8,242,423	7,753,631	7,090,645	7,006,596	7,215,006	7,476,497	7,266,217	6,939,924	6,780,184	6,171,627
MD	214	244	298	133	93	75	82	88	28	68	56	36
MI	25,662	34,221	44,579	69,133	102,113	119,262	129,954	148,047	159,731	158,302	152,593	153,051
MS	118,805	103,989	99,706	78,787	74,345	70,762	82,995	106,579	144,077	185,469	211,371	167,231
MO	22	9	33	33	30	29	20	-	-	-	-	-
MT	32,720	33,474	56,175	54,873	40,734	42,563	46,819	46,522	53,888	51,867	56,565	56,517
NE	3,496	3,478	3,836	2,538	2,565	2,511	2,789	2,882	3,208	2,550	2,519	2,280
NM	1,167,577	1,216,061	1,218,749	1,244,779	1,217,430	1,230,976	1,202,973	1,174,198	1,181,363	1,149,781	1,134,113	991,178
NY	2,202	3,679	4,539	4,990	7,628	9,235	10,682	13,900	15,500	15,643	16,074	15,877
ND	33,864	32,472	27,703	31,206	24,786	31,470	29,173	30,499	18,468	42,346	42,573	53,818
OH	79,903	89,995	93,610	92,055	84,960	88,891	99,327	114,098	123,481	138,856	141,134	138,391
OK	1,684,260	1,806,887	1,770,980	1,638,942	1,605,410	1,726,513	1,769,519	1,773,582	1,835,366	1,891,824	2,019,199	1,934,412
OR	-	-	-	-	-	-	-	-	2	5	5	3
PA	76,451	73,958	78,514	82,637	84,676	89,386	91,717	97,763	96,313	97,439	122,454	121,111
SD	-	-	-	-	-	-	-	-	914	1,193	1,155	2,311
TN	89	25	20	17	27	47	263	468	941	1,241	1,719	2,976
TX	8,550,705	8,657,840	8,513,850	8,170,798	7,485,764	7,191,859	7,051,027	6,548,184	7,174,623	7,251,879	7,050,207	6,468,817
UT	42,418	39,474	42,715	50,522	55,354	57,416	60,696	58,416	58,605	87,766	91,191	94,255
VA	2,619	2,787	5,101	7,096	6,723	6,937	8,220	8,492	8,544	7,812	8,903	6,880
WV	234,027	214,951	208,676	202,306	154,484	153,322	152,767	148,564	150,505	156,551	161,251	150,850
WY	380,105	375,059	357,731	326,657	316,123	328,768	330,180	357,267	414,416	409,541	410,199	424,657
TOT	22,493,012	22,531,698	22,647,549	21,600,522	20,108,661	19,952,438	20,025,463	19,974,033	20,471,260	20,378,787	20,177,701	18,519,675

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Energy Information Administration, Natural Gas Annuals

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1983	1984	1985	1986
Alabama	90,801	101,821	107,342	107,184
Alaska	276,691	289,129	321,346	302,841
Arizona	132	45	85	63
Arkansas	127,561	135,161	155,099	131,075
California	415,324	476,333	491,283	462,218
Colorado	163,545	173,257	178,233	163,684
Florida	21,056	12,585	10,545	8,833
Illinois	1,030	1,530	1,324	1,887
Indiana	135	392	367	365
Kansas	434.736	465,979	512,872	465,695
Kentucky	46,720	61,518	73,126	80,195
Louisiana	5,332,113	5,825,055	5,012,702	4,895,394
Maryland	31	60	39	20
Michigan	138,910	144,537	131,855	127,287
Mississippi	151,204	157,911	144,172	140,833
Missouri	0	4	4	4
Montana	51,967	51,474	52,494	46,592
Nebraska	2,091	2,300	1,944	1,403
New Mexico	895,279	957,366	905,272	702,614
New York	17,836	25,200	31,561	29,964
North Dakota	69,319	70,496	72,633	55,098
Ohio	151,300	186,480	182,245	182,072
Oklahoma	1,730,061	1,985,869	1,936,341	1,917,493
Oregon	3	2,790	4,080	4,600
Pennsylvania	118,372	166,342	150,234	159,889
South Dakota	1,846	1,947	2,558	2,231
Tennessee	3,950	5,022	4,686	3,464
Texas	5,938,561	6,185,021	6,052,663	6,151,775
Utah	63,158	74,698	83,405	90,013
Virginia	4,346	8,901	15,041	15,427
West Virginia	130,178	143,730	144,883	135,431
Wyoming	443,988	516,683	416,565	403,266
TOTAL	16,822,144	18,229,638	17,197,999	16,790,910

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals

Section XIII
Table 10

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
AL	50,713	61,113	71,072	92,466	111,030	125,874	136,825	139,551	151,325	160,261	165,772	172,406
AK	-	-	-	-	-	-	-	-	-	-	-	-
AZ	27,768	34,983	44,489	53,419	62,046	63,111	71,210	75,568	88,983	105,860	105,536	105,034
AR	102,779	112,675	113,922	135,609	155,524	165,603	176,489	192,378	197,374	196,297	201,306	202,361
CA	548,382	617,615	619,323	683,924	787,848	792,520	862,243	933,934	1,020,395	1,021,002	1,091,236	1,078,855
CO	49,027	60,585	73,664	88,692	102,769	101,835	115,922	126,048	143,018	145,640	176,936	165,099
CT	-	-	-	-	-	1,039	5,833	11,415	14,187	18,109	20,328	27,884
DE	-	-	708	1,022	1,679	2,276	1,972	2,980	4,280	5,824	6,014	8,301
DC	8,474	9,361	9,305	10,694	11,904	12,782	13,134	14,261	15,042	15,833	15,701	17,594
FL	7,891	8,973	10,185	12,348	13,044	16,001	19,577	23,159	26,402	35,322	38,871	44,174
GA	41,368	47,552	58,824	67,894	94,596	108,329	122,742	132,069	133,044	146,567	154,778	164,114
ID	-	-	-	-	-	-	-	-	-	765	10,733	15,903
IL	132,153	168,796	202,546	235,211	250,812	344,705	350,980	391,408	398,718	417,443	422,840	452,006
IN	42,528	50,774	55,263	58,620	69,177	96,124	103,444	116,308	126,897	140,135	145,179	154,583
IA	40,948	50,350	57,620	66,233	79,640	94,951	106,755	119,876	138,661	147,892	154,964	159,982
KS	191,952	199,893	206,593	242,603	278,892	279,632	283,604	293,784	309,028	324,335	343,833	362,280
KY	36,938	41,357	45,504	61,323	74,386	87,006	104,781	110,039	117,496	126,580	132,436	136,990
LA	375,206	426,837	450,712	475,500	549,305	599,312	594,656	636,704	774,320	839,393	840,331	931,203
ME	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
MD	3,402	4,280	4,821	13,813	22,286	26,468	29,470	35,010	39,889	47,553	51,177	57,328
MA	-	-	-	-	1,783	11,386	17,683	35,486	43,932	50,691	56,626	67,602
MI	80,571	75,978	84,315	127,180	154,283	163,991	178,307	188,922	207,005	243,465	272,353	298,104
MN	43,198	52,376	59,040	67,861	84,205	97,591	104,508	115,140	123,734	136,831	147,732	149,042
MS	52,461	65,245	60,987	76,918	97,786	119,638	118,617	136,797	138,186	145,353	148,279	157,169
MO	78,101	90,883	99,667	140,384	156,922	168,992	173,674	188,349	199,272	219,424	223,528	241,239
MT	30,919	32,919	34,361	38,544	37,481	40,771	39,934	40,624	47,491	47,690	52,200	51,825
NE	39,699	47,647	51,911	61,742	72,386	78,544	83,384	93,189	102,177	109,265	116,326	114,661
NV	-	-	-	-	-	-	-	982	2,484	6,676	8,666	8,826
NH	-	-	-	-	3	316	857	1,065	1,206	1,445	1,787	2,421
NJ	-	-	3,172	3,209	30,887	40,409	58,685	65,718	74,601	90,092	100,483	119,946
NM	102,766	110,132	127,423	147,509	174,808	194,748	200,039	177,221	215,281	229,821	243,800	251,518
NY	41,572	44,200	51,064	65,157	144,920	180,747	197,878	225,844	243,513	268,408	299,153	343,326
NC	-	-	-	-	1,631	2,945	6,172	9,436	12,644	16,579	19,533	23,519
ND	2,608	2,712	2,686	3,279	3,408	3,342	3,559	4,820	9,320	10,428	13,753	15,639
OH	221,571	236,137	246,212	324,594	375,820	393,250	420,809	442,523	500,865	561,557	583,753	618,022
OK	254,522	277,955	258,579	286,793	307,887	319,908	333,972	327,936	334,057	358,930	387,277	342,080
OR	-	-	-	-	-	-	-	-	-	4,473	18,227	22,752
PA	175,906	191,631	209,749	263,199	311,937	324,187	335,457	353,185	390,280	431,325	445,813	465,732
RI	-	-	-	-	-	-	670	4,423	5,375	6,242	8,139	9,940
SC	-	-	-	-	853	2,896	8,772	16,573	23,043	44,467	39,741	39,678
SD	8,016	8,540	8,212	10,001	11,447	11,701	13,688	15,564	16,107	18,002	18,251	19,535
TN	33,986	37,766	41,609	67,813	88,078	99,817	106,130	114,869	118,052	126,815	130,601	142,860
TX	1,444,422	1,605,955	1,658,379	1,824,553	2,130,377	2,175,100	2,194,172	2,198,175	2,236,540	2,323,847	2,455,528	2,555,541
UT	20,919	21,627	24,338	26,368	29,014	30,929	34,592	41,073	48,903	54,669	57,004	55,706
VT	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
VA	3,055	3,877	4,324	7,639	14,853	18,630	27,716	35,604	38,884	43,362	48,527	56,052
WA	-	-	-	-	-	-	-	-	-	5,224	40,108	53,063
WV	106,105	112,702	111,802	132,273	139,608	146,153	148,017	138,846	158,006	161,246	159,520	164,347
WI	267	323	1,696	15,380	28,382	33,632	36,339	39,287	40,621	48,188	59,592	67,596
WY	26,351	31,400	31,407	36,637	38,865	36,287	36,070	36,709	39,705	45,552	45,504	46,810
TOT	4,426,544	4,945,149	5,195,484	6,026,404	7,102,562	7,613,478	7,979,338	8,402,852	9,070,343	9,706,878	10,279,775	10,760,648

(1) Included with New Hampshire.

Source: U.S. Bureau of Mines, Natural Gas Annuals

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
AL	178,595	184,118	184,909	194,369	205,763	222,047	229,152	233,098	254,176	287,212	300,892	298,497
AK	133	229	557	2,137	4,214	5,781	6,922	10,784	11,889	17,548	42,726	63,726
AZ	112,722	135,494	153,674	157,892	157,494	162,570	154,489	162,320	158,766	176,547	195,476	192,996
AR	218,528	216,516	209,420	224,744	251,129	273,671	281,825	295,078	295,460	321,569	349,990	381,951
CA	1,180,331	1,311,253	1,405,882	1,476,322	1,554,126	1,737,341	1,757,292	1,884,878	1,911,132	2,046,080	2,048,534	2,126,466
CO	196,057	207,464	212,611	204,940	207,663	236,325	236,745	233,896	231,508	256,820	272,437	282,328
CT	25,875	28,453	30,361	32,227	34,809	37,502	40,822	47,695	49,780	53,202	57,485	60,574
DE	9,459	9,035	9,380	14,492	16,378	17,091	17,969	19,045	21,063	24,059	25,863	26,421
DC	17,123	18,142	18,518	19,338	19,359	20,633	21,210	(2)	(2)	(2)	(2)	(2)
FL	91,490	137,875	143,656	157,735	177,496	185,249	188,389	212,278	225,531	273,524	311,885	336,816
GA	180,342	182,087	179,957	192,638	187,600	206,691	211,321	233,291	254,334	283,115	311,543	332,526
ID	19,641	22,006	23,969	25,806	26,635	30,825	33,889	36,104	34,283	39,479	41,436	46,570
IL	518,111	536,549	574,346	620,309	658,432	731,921	772,092	854,149	948,353	994,404	1,085,392	1,173,878
IN	171,158	212,851	239,932	272,309	297,897	333,718	357,882	399,905	434,632	454,013	530,981	545,368
IA	182,827	187,138	204,663	213,552	219,005	243,634	247,513	239,478	272,850	297,498	318,341	348,662
KS	380,241	372,302	364,957	380,055	387,880	433,429	464,337	507,704	450,963	496,550	547,227	575,694
KY	147,993	159,710	161,912	168,138	175,928	185,780	182,828	160,392	192,464	196,807	234,882	248,048
LA	893,369	947,938	1,036,887	1,007,041	1,070,471	1,139,186	1,155,260	1,258,776	1,394,376	1,521,492	1,762,955	1,840,840
ME	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
MD	60,674	64,923	68,390	76,551	81,774	86,813	93,957	117,208	139,853	149,125	168,944	182,135
MA	72,994	77,886	81,768	89,015	98,447	106,699	114,227	116,198	128,217	132,325	136,988	147,307
MI	332,756	368,531	407,732	443,677	463,667	500,628	558,240	619,863	686,095	700,538	776,573	809,124
MN	161,390	179,827	192,584	214,130	219,047	236,976	248,741	264,488	283,086	311,898	325,687	342,322
MS	183,158	188,864	190,930	199,733	227,184	252,023	249,845	286,390	282,160	312,891	326,165	360,382
MO	255,095	261,372	274,487	289,482	303,075	325,194	341,144	351,768	360,703	365,546	398,697	429,526
MT	52,183	54,569	57,781	63,298	67,337	67,652	70,895	73,829	65,038	62,898	78,283	87,791
NE	132,651	139,028	143,169	146,043	149,014	164,224	168,032	198,592	188,661	203,345	210,033	222,335
NV	10,450	12,447	15,864	17,528	19,292	23,928	27,679	34,218	35,035	37,029	44,140	52,558
NH	2,480	2,852	3,018	3,315	3,596	3,813	4,084	5,567	6,578	6,630	9,196	10,691
NJ	132,984	139,258	153,806	174,210	188,249	200,109	209,757	227,271	251,482	268,495	304,835	322,853
NM	272,922	266,409	288,455	292,495	275,969	257,173	263,798	261,918	255,590	260,774	251,905	270,103
NY	379,928	419,460	435,417	474,384	506,942	513,828	544,414	631,808	589,120	639,845	683,688	710,885
NC	32,685	45,442	50,523	56,373	62,296	68,533	75,745	86,753	97,981	114,809	136,651	151,227
ND	16,981	17,274	19,625	22,196	23,765	26,232	30,318	40,836	31,858	33,053	32,682	32,717
OH	670,618	698,569	719,674	756,398	797,318	824,111	879,639	944,767	962,821	987,841	1,031,963	1,052,933
OK	379,178	383,042	378,096	485,726	588,245	598,631	524,404	490,032	449,378	496,465	546,191	597,196
OR	27,498	30,861	33,827	37,865	43,350	53,984	56,065	65,093	69,877	79,226	87,854	95,284
PA	502,066	520,788	529,716	550,080	585,426	607,277	629,485	677,111	678,478	717,909	765,941	772,388
RI	11,011	11,839	12,780	13,794	14,725	15,465	16,349	16,684	18,493	20,704	22,555	25,093
SC	54,363	58,532	60,928	70,645	75,099	78,716	86,865	96,437	100,539	127,514	140,826	159,830
SD	23,584	24,533	25,820	27,413	25,159	27,639	26,974	28,256	27,735	28,815	33,826	36,319
TN	149,462	155,623	160,667	167,737	169,418	181,476	201,499	226,025	232,212	234,288	247,857	256,148
TX	2,865,595	2,981,167	3,030,914	3,209,968	3,313,837	3,377,093	3,482,821	3,709,715	3,485,246	3,696,396	3,877,376	4,093,357
UT	61,401	75,650	81,879	92,890	103,628	119,625	114,601	106,474	105,052	109,866	119,879	121,937
VT	(1)	(1)	(1)	(1)	(1)	-	-	(1)	(1)	(1)	(1)	(1)
VA	59,842	66,181	70,579	77,254	83,011	89,072	95,700	121,702	115,887	121,928	128,748	136,523
WA	58,650	64,934	70,343	81,431	86,834	105,789	108,108	116,879	127,230	139,421	144,521	149,992
WV	191,548	179,969	192,221	188,602	190,264	182,515	179,084	183,109	151,078	183,003	169,841	181,278
WI	82,377	90,620	113,679	136,516	152,354	170,202	200,484	224,675	248,033	271,765	316,279	337,822
WY	59,119	59,635	61,451	67,336	69,879	67,559	70,298	79,174	73,284	78,801	100,071	109,996
TOT	11,819,638	12,509,427	13,081,714	13,890,129	14,640,480	15,536,373	16,033,189	17,191,711	17,388,360	18,632,062	20,056,240	21,139,386

Note: Consumption includes volumes of natural gas which is distributed as a component of mixed gas.
(1) Included with New Hampshire.
(2) Included with Maryland.
Source: 1947-1966 U.S. Bureau of Mines, Mineral Yearbooks--Fuels
1967-Present U.S. Energy Information Administration, Natural Gas Annual

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	285,973	278,467	272,068	274,761	264,088	225,979	241,237	237,258	283,435	269,240
Alaska	67,706	74,658	63,073	62,874	84,751	90,121	116,278	145,025	157,236	153,345
Arizona	213,313	227,909	214,323	192,446	156,222	171,275	167,092	175,041	172,738	165,850
Arkansas	333,644	316,375	327,803	290,393	258,220	248,941	229,558	220,699	250,747	273,720
California	2,149,264	2,185,543	2,045,627	1,834,413	1,832,849	1,756,611	1,772,041	1,563,172	1,810,381	1,807,731
Colorado	289,369	309,703	324,007	313,056	307,772	302,284	282,215	267,838	292,272	256,363
Connecticut	61,434	64,008	62,609	66,343	64,011	65,855	64,068	65,191	67,957	72,583
Delaware	26,452	24,088	22,949	20,365	18,603	19,182	15,787	20,626	24,981	29,797
Dist. of Col.	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	27,868
Florida	336,721	298,977	311,498	289,551	280,095	289,017	302,344	318,344	344,177	316,588
Georgia	342,579	331,143	348,089	330,339	326,559	261,320	264,665	278,272	312,299	315,201
Idaho	50,096	56,630	56,045	53,057	60,451	47,156	45,537	44,210	54,237	49,047
Illinois	1,229,277	1,207,289	1,150,266	1,149,394	1,095,115	1,175,235	1,167,099	1,174,934	1,142,732	1,089,720
Indiana	566,996	576,948	542,300	531,872	477,341	425,221	398,268	440,955	504,185	489,254
Iowa	344,639	344,516	364,640	367,595	345,798	311,425	280,246	238,229	291,521	269,581
Kansas	606,989	628,109	604,460	587,013	498,727	515,197	506,910	519,346	584,236	488,338
Kentucky	244,360	255,208	245,472	228,003	207,539	245,967	219,521	212,913	218,689	202,284
Louisiana	1,883,924	1,939,762	2,009,859	2,008,364	1,788,588	2,043,705	2,190,848	2,249,172	1,978,382	1,794,007
Maine	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2,268
Maryland	188,371	204,922	201,961	199,331	165,932	176,272	158,838	161,695	201,584	160,244
Massachusetts	156,451	160,280	155,547	155,268	153,967	156,247	160,343	160,503	156,459	182,587
Michigan	850,562	864,770	920,351	936,043	884,184	888,035	741,295	789,594	875,726	865,137
Minnesota	351,442	351,408	360,811	351,644	331,186	320,156	293,381	313,229	334,202	285,846
Mississippi	378,321	377,986	313,992	276,199	230,053	199,122	197,689	203,719	254,366	263,530
Missouri	429,105	425,215	426,807	409,884	369,620	380,258	366,970	358,905	347,257	318,450
Montana	88,271	84,322	90,230	79,909	79,520	74,371	70,956	72,649	69,805	60,724
Nebraska	223,674	224,562	229,632	222,807	218,834	198,634	188,804	163,051	170,013	163,079
Nevada	66,511	69,522	73,072	63,438	61,251	66,797	71,052	64,506	84,433	58,454
New Hampshire	12,088	13,267	13,881	14,697	13,534	13,545	13,609	14,039	14,881	9,474
New Jersey	326,768	321,288	301,566	275,050	244,102	321,535	247,120	228,843	260,579	339,825
New Mexico	269,368	287,993	256,811	257,436	240,260	278,976	229,813	213,698	211,182	221,793
New York	716,550	692,730	682,547	627,493	576,883	595,933	561,698	569,702	623,891	737,443
North Carolina	160,567	163,897	160,871	140,217	114,822	101,175	72,527	81,989	130,884	153,316
North Dakota	33,577	36,473	32,428	35,459	36,826	41,177	37,650	39,067	29,236	22,848
Ohio	1,087,126	1,147,804	1,104,156	1,086,651	956,876	1,005,927	847,497	929,593	898,029	896,983
Oklahoma	611,582	629,757	611,738	660,010	668,819	760,110	766,986	770,249	824,908	722,318
Oregon	100,897	110,360	107,961	98,051	109,898	92,500	72,521	86,140	93,707	78,703
Pennsylvania	802,132	828,961	783,297	715,548	653,742	713,518	668,337	673,770	740,818	775,715
Rhode Island	25,662	22,494	20,559	23,781	23,129	20,697	25,631	23,042	27,219	27,630
South Carolina	156,263	144,120	153,147	131,991	122,949	148,989	138,585	117,573	119,319	142,228
South Dakota	31,832	34,077	31,221	32,076	32,534	39,207	36,097	35,423	25,724	24,078
Tennessee	265,011	277,275	293,620	260,171	217,328	212,326	202,135	184,048	226,477	229,661
Texas	4,364,728	4,412,636	4,621,378	4,463,488	3,944,377	3,975,307	4,143,023	4,211,432	4,001,355	4,091,099
Utah	121,403	124,093	123,106	121,015	124,160	146,205	106,315	118,513	126,0[illegible]7	115,092
Vermont	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	3,991
Virginia	144,014	155,658	152,848	143,650	121,320	123,509	118,020	134,144	134,088	158,479
Washington	156,663	170,448	197,861	182,723	164,334	148,781	142,657	127,280	158,515	128,770
West Virginia	178,380	199,141	186,316	182,370	158,435	150,723	144,535	151,839	148,538	143,047
Wisconsin	348,132	320,826	367,961	381,148	364,801	315,154	349,160	370,726	367,517	351,857
Wyoming	115,286	125,834	108,599	95,746	87,188	86,819	83,623	87,292	93,797	68,975
U.S. Total	21,793,454	22,101,452	22,049,363	21,223,133	19,537,593	19,946,496	19,520,581	19,627,478	20,240,761	19,877,293(3)

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(1) Included with New Hampshire.
(2) Included with Maryland.
(3) Total includes 3,131 MMcf from Hawaii in 1980.
(4) Total may not add due to independent rounding.
Source: U.S. Energy Information Administration, Natural Gas Annuals

Section XIII
Table 10c

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1981(1)	1982	1983	1984	1985	1986
Alabama	271,280	240,957	221,583	231,997	219,455	202,923
Alaska	121,727	237,881	239,200	257,525	212,765	206,452
Arizona	182,533	135,031	115,233	121,149	130,776	101,249
Arkansas	264,787	226,941	206,966	210,021	195,633	199,197
California	1,858,178	1,682,718	1,535,031	1,669,705	1,846,078	1,531,323
Colorado	211,780	224,991	213,812	229,647	218,942	197,847
Connecticut	76,829	78,246	74,427	81,139	78,215	78,903
Delaware	30,643	27,833	34,884	42,962	38,493	33,009
Dist. of Col.	29,023	29,280	29,340	29,449	28,902	29,586
Florida	337,557	324,807	306,307	303,309	289,706	288,541
Georgia	316,613	294,651	295,531	307,323	281,805	279,082
Hawaii	2,899	2,804	2,669	2,375	2,483	2,463
Idaho	44,960	39,971	35,179	38,604	39,194	34,721
Illinois	1,061,957	994,179	938,340	1,032,779	962,039	924,280
Indiana	496,349	467,842	426,770	452,284	432,958	395,181
Iowa	253,231	237,089	220,517	234,846	225,903	206,902
Kansas	428,130	400,920	346,204	363,671	355,467	312,680
Kentucky	199,445	188,536	174,306	189,255	172,510	167,713
Louisiana	1,781,716	1,556,052	1,412,983	1,594,346	1,386,365	1,438,563
Maine	2,326	2,691	2,424	2,449	2,531	2,473
Maryland	175,289	157,990	145,628	158,989	150,838	152,542
Massachusetts	184,575	195,107	191,815	208,758	218,884	186,350
Michigan	800,873	748,141	696,455	718,103	709,232	671,323
Minnesota	266,282	262,039	240,777	255,638	257,480	244,772
Mississippi	242,987	269,131	237,859	268,560	226,663	214,824
Missouri	283,514	279,449	258,560	264,954	259,900	241,660
Montana	52,452	52,208	46,249	48,864	47,265	41,148
Nebraska	138,322	138,238	129,920	134,465	126,135	104,732
Nevada	73,182	46,627	41,926	42,256	39,200	33,790
New Hampshire	10,220	10,078	9,655	10,531	10,629	10,291
New Jersey	390,121	375,660	405,387	418,220	379,230	353,465
New Mexico	196,212	204,163	178,698	161,850	151,128	134,198
New York	760,463	775,268	720,398	790,011	762,261	728,802
North Carolina	152,496	142,129	136,579	143,854	133,825	135,819
North Dakota	34,445	28,370	26,126	30,153	28,096	25,471
Ohio	870,341	813,519	747,268	785,297	733,116	716,778
Oklahoma	670,971	676,762	628,950	652,953	587,407	554,125
Oregon	75,562	70,824	67,045	78,643	83,002	70,973
Pennsylvania	784,691	694,639	643,952	676,721	625,667	609,953
Rhode Island	29,202	27,874	29,044	31,689	29,874	26,354
South Carolina	141,924	98,100	101,632	108,429	97,469	98,549
South Dakota	22,056	25,089	23,326	24,592	25,202	23,292
Tennessee	223,529	207,161	194,610	206,353	190,266	188,000
Texas	3,926,687	3,394,404	3,241,515	3,432,624	3,385,715	3,185,509
Utah	102,239	117,706	110,185	115,578	115,117	105,175
Vermont	4,383	4,370	4,359	4,868	4,998	5,019
Virginia	151,737	150,964	142,944	143,582	139,458	141,024
Washington	124,942	108,653	107,193	126,287	134,599	118,360
West Virginia	148,527	130,029	115,813	124,368	117,168	112,573
Wisconsin	324,611	312,007	299,099	305,076	308,365	278,848
Wyoming	69,056	90,923	80,871	85,423	82,172	75,029
U.S. Total	19,403,858	18,001,055	16,834,914	17,950,528	17,280,943	16,221,296

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Natural Gas Annuals

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Alabama	0.5	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Alaska	--	--	--	--	--	--	--	--	--	--	--
Arkansas	890.1	901.8	874.2	907.6	931.3	984.6	1,211.3	1,165.4	1,164.4	1,171.5	1,283.0
California	10,164.4	10,192.6	9,991.6	9,760.4	9,482.4	9,340.0	9,159.3	9,026.6	8,893.0	8,751.2	8,952.9
Colorado	331.9	1,349.2	1,227.1	1,115.5	1,138.5	1,164.2	1,864.3	1,932.9	2,253.6	2,422.8	2,380.7
Florida	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Illinois	221.1	227.8	233.2	229.9	227.1	211.7	231.3	253.8	233.6	219.7	166.4
Indiana	13.0	21.6	25.2	31.2	30.8	36.7	35.8	36.0	33.1	33.8	31.0
Kansas	14,556.9	14,407.8	14,089.6	13,790.8	13,457.5	14,193.6	15,787.6	15,758.3	16,293.1	17,566.3	19,296.0
Kentucky	1,379.5	1,378.2	1,349.4	1,330.6	1,325.6	1,313.5	1,301.5	1,286.6	1,262.3	1,245.6	1,225.0
Louisiana	23,481.2	23,977.5	26,687.8	28,533.3	29,005.0	31,451.6	34,458.9	36,800.0	42,435.6	45,054.0	51,436.0
Michigan	168.5	183.0	214.9	195.1	203.0	254.5	275.5	330.1	325.9	361.8	444.0
Mississippi	2,452.8	2,504.3	2,529.0	2,519.2	2,440.0	2,364.1	2,569.2	2,772.7	2,608.3	2,403.3	2,297.7
Montana	700.5	852.6	803.5	797.4	828.1	827.6	764.0	723.7	719.7	696.4	670.5
Nebraska	0.7	(3)	(3)	44.1	95.8	94.0	182.1	192.9	203.4	225.4	189.3
New Mexico	5,990.3	5,606.4	6,241.0	6,990.7	11,590.0	14,038.9	17,522.2	17,240.7	18,584.9	23,472.7	22,258.0
New York	64.9	67.6	66.7	64.8	66.8	68.6	71.0	69.4	75.8	85.2	93.4
North Dakota	--	--	--	(3)	(3)	(3)	(3)	(3)	280.7	397.5	743.4
Ohio	611.2	629.5	652.8	658.9	689.1	731.5	756.0	774.7	809.9	853.6	901.8
Oklahoma	11,350.9	11,332.4	11,626.0	11,634.3	11,804.3	11,764.8	12,228.4	12,396.1	13,204.7	13,775.0	14,259.5
Pennsylvania	483.1	617.4	621.7	627.2	619.5	709.6	751.8	732.2	754.4	776.2	853.6
Texas	90,025.6	95,708.6	99,170.4	102,404.1	105,653.2	105,732.8	106,529.6	105,129.1	108,287.5	112,728.8	113,084.5
Utah	(3)	69.8	65.6	84.8	95.8	283.4	1,113.1	387.4	420.9	619.8	859.3
Virginia	--	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	35.6	37.5
West Virginia	1,780.7	1,737.2	1,715.2	1,650.7	1,671.5	1,660.1	1,653.9	1,607.3	1,564.9	1,561.7	1,560.9
Wyoming	1,191.8	2,093.7	2,173.7	2,195.0	2,340.3	2,321.1	2,739.6	2,855.1	3,196.1	3,235.9	3,457.4
Miscellaneous(1)	67.4	10.4	23.1	27.5	115.8	169.3	240.6	239.8	91.8	80.8	87.4
TOTAL U.S.(2)	165,926.9	173,869.3	180,381.3	185,592.7	193,811.5	199,716.2	211,447.1	211,710.7	223,697.4	237,774.6	246,569.3

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.
(3) Included in miscellaneous.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada, Annuals.

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Alabama	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Alaska	--	(3)	107.7	926.8	1,643.2	1,690.7	1,831.4	1,985.3	2,946.9	3,635.3	5,252.3
Arkansas	1,388.3	1,422.8	1,459.7	1,477.0	1,652.6	1,792.6	2,100.1	2,269.0	2,599.6	2,811.3	2,715.1
California	8,966.5	8,593.4	8,843.9	9,103.6	9,171.2	8,865.7	9,053.7	8,832.4	8,474.4	7,723.8	7,316.3
Colorado	2,349.2	2,496.2	2,042.8	2,170.7	2,216.8	1,876.1	1,729.3	1,717.6	1,651.4	1,769.3	1,660.1
Florida	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Illinois	170.5	175.1	173.1	164.2	159.1	168.6	179.5	209.7	236.5	258.6	297.9
Indiana	30.6	35.1	34.1	32.3	49.9	60.2	71.3	72.4	71.2	74.8	75.5
Kansas	20,233.8	19,981.4	19,620.2	19,190.0	18,668.6	17,994.2	17,278.1	16,596.4	15,923.3	15,283.7	14,511.2
Kentucky	1,215.3	1,159.4	1,143.8	1,126.8	1,115.0	1,085.2	1,094.4	1,092.2	1,017.0	954.0	923.3
Louisiana	55,111.9	59,853.9	63,386.1	66,028.7	71,934.8	75,365.0	79,076.3	82,811.2	83,684.1	86,290.0	88,015.6
Michigan	498.1	515.4	585.8	666.7	650.6	722.8	774.3	745.8	773.1	760.9	757.4
Mississippi	2,598.4	2,486.5	2,542.3	2,848.0	2,750.8	2,181.6	2,355.8	1,973.4	1,668.9	1,597.0	1,434.1
Montana	682.0	665.5	626.2	596.3	603.4	598.1	590.3	595.9	620.4	837.7	911.5
Nebraska	143.3	132.7	117.8	104.3	100.7	100.0	93.4	79.6	72.8	63.8	56.8
New Mexico	21,180.0	17,912.8	15,603.7	14,757.7	14,189.8	15,037.8	15,354.4	15,374.6	14,753.1	15,092.5	15,143.2
New York	96.4	106.5	96.2	128.3	131.9	132.3	133.5	135.7	120.9	121.1	124.1
North Dakota	1,124.5	1,206.5	1,151.0	948.5	968.0	1,119.6	1,110.6	1,121.2	1,024.5	882.1	866.8
Ohio	818.1	748.8	765.6	733.8	731.9	748.2	709.4	754.8	755.2	762.7	783.9
Oklahoma	15,206.8	16,651.3	17,311.4	17,350.9	18,358.7	19,138.8	19,757.2	20,357.4	21,122.2	19,403.8	18,368.3
Pennsylvania	870.0	1,052.0	1,192.5	1,168.9	1,181.5	1,214.5	1,243.6	1,257.0	1,350.6	1,392.2	1,345.0
Texas	115,045.7	120,475.8	119,489.4	119,838.7	119,503.8	117,809.4	118,855.1	120,616.8	123,609.3	125,415.1	119,001.1
Utah	1,058.1	1,264.3	1,526.1	2,030.2	1,796.1	1,638.3	1,519.4	1,438.8	1,372.2	1,226.5	1,156.6
Virginia	38.4	38.6	33.3	34.1	33.2	31.3	32.2	32.5	37.6	37.8	34.3
West Virginia	1,557.6	1,593.6	1,831.1	2,019.0	2,037.1	2,311.2	2,347.9	2,494.0	2,622.2	2,580.0	2,585.6
Wyoming	3,649.8	3,847.1	3,934.7	4,127.0	3,952.7	3,988.5	3,768.6	3,703.3	3,494.0	3,685.5	3,768.5
Miscellaneous(1)	108.5	182.0	140.1	155.1	164.2	180.3	191.8	201.9	132.4	248.5	245.4
TOTAL U.S.(2)	254,142.0	262,596.6	263,758.8	267,727.7	273,765.6	276,151.2	281,251.5	286,468.9	289,332.8	292,907.7	287,349.9

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(1) Includes Arizona, Florida, Iowa, Maryland, Missouri, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.
(3) Included in Miscellaneous.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada, Annuals.

Section XIII
Table 11b

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Alabama	56.7	162.0	180.5	245.7	327.4	507.4	771.0	707.2	530.0	514.0	652.0
Alaska	5,202.1	31,130.8	31,365.4	31,455.4	31,642.6	31,866.6	32,050.7	31,929.6	32,243.0	32,045.0	32,259.0
Arkansas	2,632.8	2,580.7	2,430.1	2,455.9	2,269.4	2,113.4	1,993.3	1,728.3	1,660.0	1,681.0	1,703.0
California	6,870.9	6,299.8	5,729.5	5,328.9	5,199.8	5,194.6	5,484.0	5,342.0	4,737.0	4,947.0	5,022.0
Colorado	1,596.3	1,628.8	1,818.3	1,655.2	1,868.3	1,881.7	1,893.0	1,887.8	2,512.0	2,765.0	2,608.0
Florida	(3)	(3)	178.7	180.6	148.9	308.9	266.9	257.5	151.0	119.0	77.0
Illinois	337.8	415.4	499.0	545.4	380.5	399.4	380.8	376.9	(3)	(3)	(3)
Indiana	77.6	82.7	86.7	87.3	66.7	64.1	59.8	45.4	(3)	(3)	(3)
Kansas	14,125.1	13,325.1	12,535.2	11,938.7	11,722.4	11,704.7	12,661.2	11,950.6	11,457.0	10,992.0	10,243.0
Kentucky	920.5	977.8	956.3	938.1	864.9	844.0	812.6	771.5	451.0	545.0	468.0
Louisiana	85,056.6	82,956.7	78,625.8	74,971.3	69,151.6	64,052.4	61,309.4	57,501.8	57,010.0	55,725.0	50,042.0
Michigan	751.0	939.7	1,016.5	1,296.8	1,548.5	1,458.3	1,606.7	1,598.1	1,386.0	1,422.0	1,204.0
Mississippi	1,410.9	1,333.9	1,117.4	1,104.3	1,178.2	1,079.4	1,207.6	1,061.3	1,437.0	1,635.0	1,504.0
Montana	1,110.2	1,099.9	1,024.6	1,064.0	1,092.4	901.3	930.0	1,106.3	887.0	926.0	825.0
Nebraska	56.6	58.2	59.4	50.3	48.8	54.6	55.8	59.2	(3)	(3)	(3)
New Mexico	14,281.5	13,290.0	13,068.0	12,335.6	12,488.4	11,944.9	11,759.3	11,916.6	12,000.0	12,688.0	13,724.0
New York	120.5	126.0	139.1	139.2	136.8	165.5	215.8	236.0	165.0	193.0	211.0
North Dakota	648.6	567.4	503.7	441.6	448.2	432.7	416.8	405.9	361.0	374.0	439.0
Ohio	809.3	993.5	1,068.4	1,146.7	1,179.4	1,308.2	1,354.0	1,350.6	495.0	684.0	1,479.0
Oklahoma	17,593.2	16,954.3	15,712.8	14,492.0	14,098.7	13,390.3	13,083.0	12,435.3	13,889.0	14,417.0	13,816.0
Pennsylvania	1,303.9	1,377.5	1,395.9	1,406.9	1,494.4	1,492.1	1,682.5	1,651.9	769.0	899.0	1,515.0
Texas	112,392.6	106,353.0	101,472.1	95,042.0	84,936.5	78,540.7	71,036.9	64,651.4	56,422.0	55,583.0	53,021.0
Utah	1,090.8	1,065.2	982.0	1,022.1	1,024.7	1,031.4	917.4	829.9	877.0	925.0	948.0
Virginia	31.4	32.5	31.1	35.9	37.3	44.7	47.5	56.4	(3)	(3)	(3)
West Virginia	2,447.3	2,436.4	2,411.8	2,346.0	2,319.8	2,265.6	2,311.3	2,273.3	1,567.0	1,634.0	1,558.0
Wyoming	3,937.0	4,243.3	4,131.5	4,088.7	4,109.5	3,917.4	3,703.2	3,704.4	6,305.0	7,211.0	7,526.0
Miscellaneous(1)	247.4	316.1	266.0	270.0	165.9	168.1	189.4	191.0	102.0	109.0	153.0
TOTAL U.S.(2)	275,108.8	290,746.4	278,805.6	266,084.8	249,950.2	237,132.5	228,200.2	216,026.1	207,413.0	208,033.0	200,997.0

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.
(3) Included in Miscellaneous.

Source: 1969-1976: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the U. S. and Canada, Annuals.
1977-1979: DOE/EIA--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	636.0	648.0	648.0	785.0	961.0	821.0	951.0	842.0
Alaska	33,382.0	33,037.0	34,990.0	34,283.0	34,476.0	33,847.0	32,664.0	33,225.0
Arkansas	1,774.0	1,801.0	1,958.0	2,069.0	2,227.0	2,019.0	1,992.0	1,997.0
California	5,414.0	5,617.0	5,552.0	5,781.0	5,554.0	4,325.0(4)	3,928.0(4)	3,740.0(4)
Colorado	2,922.0	2,961.0	3,314.0	3,148.0	2,943.0	2,881.0	3,027.0	2,942.0
Florida	84.0	69.0	64.0	49.0	65.0	55.0	49.0	49.0
Illinois	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Indiana	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Kansas	9,508.0	9,860.0	9,724.0	9,553.0	9,387.0	9,337.0	10,509.0	10,494.0
Kentucky	508.0	530.0	551.0	554.0	613.0	766.0	841.0	909.0
Louisiana	47,325.0	47,377.0	44,916.0	42,561.0	41,399.0	14,038.0(4)	12,930.0(4)	12,430.0(4)
Michigan	1,406.0	1,118.0	1,084.0	1,219.0	1,112.0	985.0	1,139.0	1,451.0
Mississippi	1,769.0	2,035.0	1,796.0	1,596.0	1,491.0	1,360.0	1,300.0	1,220.0
Montana	1,287.0	1,321.0	847.0	896.0	802.0	857.0	803.0	780.0
Nebraska	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
New Mexico	13,287.0	13,870.0	12,418.0	11,676.0	11,364.0	10,900.0	11,808.0	11,620.0
New York	208.0	264.0	229.0	295.0	389.0	369.0	457.0	410.0
North Dakota	537.0	581.0	629.0	600.0	566.0	569.0	541.0	508.0
Ohio	1,699.0	965.0	1,141.0	2,030.0	1,541.0	1,331.0	1,420.0	1,069.0
Oklahoma	13,138.0	14,699.0	16,207.0	16,211.0	16,126.0	16,040.0	16,685.0	16,711.0
Pennsylvania	951.0	1,264.0	1,429.0	1,882.0	1,575.0	1,617.0	1,560.0	1,647.0
Texas	50,287.0	50,469.0	49,757.0	50,052.0	49,883.0	41,775.0(4)	40,574.0(4)	38,711.0(4)
Utah	1,201.0	1,912.0	2,161.0	2,333.0	2,080.0	1,999.0	1,895.0	1,947.0
Virginia	(3)	(3)	122.0	175.0	216.0	235.0	253.0	248.0
West Virginia	2,422.0	1,834.0	2,148.0	2,194.0	2,136.0	2,058.0	2,148.0	2,242.0
Wyoming	9,100.0	9,307.0	9,758.0	10,227.0	10,482.0	10,617.0	9,756.0	10,023.0
Miscellaneous(1)	176.0	191.0	69.0	78.0	75.0	76.0	133.0	65.0
Federal offshore(5)						34,492.0	34,223.0	31,931.0
U.S. Total(2)	199,021.0	201,730.0	201,512.0	200,247.0	197,463.0	193,369.0	191,586.0	187,211.0

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.
(3) Included in Miscellaneous.
(4) Includes offshore reserves in state waters only.
(5) Federal Offshore is a designation begun in the 1986 reported data. This number includes all state offshore reserves in federal waters, which accounts for the large decline in certain states beginning in 1985.

Source: Department of Energy, Energy Information Administration -- U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

Section XIII
Table 12

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION
(Millions of Cubic Feet)

1960		1970		1980		1983(6)	
Company	Production	Company	Production	Company	Production	Company	Production
Exxon	574,328(1)	Exxon	2,003,120(1)	Exxon	1,231,145	Exxon	855,925
Standard of Ind.	573,050	Texaco	1,399,410(1)	Texaco	955,570(1)	Standard of Ind.	651,525
Phillips	501,853	Standard of Ind.	1,114,710	Standard of Ind.	820,520	Texaco	582,540(1)
Texaco	499,971(1)	Gulf	1,006,305	Mobil	711,750	Shell	539,105
Mobil	398,945(2)	Shell	930,020	Gulf	660,030(4)	Mobil	467,930
Shell	389,384	Mobil	813,585	Shell	649,700	Gulf	465,740(4)
Gulf	365,000(1)	Atlantic Richfield	728,905	Atlantic Richfield	447,855(1)	Atlantic Richfiel	453,159
Cities Service	323,564	Phillips	580,715	Standard of Calif.	444,935(1)	Standard of Calif.	421,968
Sun	273,694	Union	567,247	Union	425,225	Tenneco	357,149
Standard of Calif.	249,126	Standard of Calif.	537,645	Tenneco	406,789	Unocal (Union)(4)	298,351
Superiod	233,999(2)	Sun	525,965(3)	Sun	382,520(1)	Phillips	291,635
United Gas Corp.	204,000(3)	Getty	439,832	Phillips	344,195	Sun	270,830
Atlantic Richfield	186,040	Cities Service	368,614	Getty	312,171	Getty	266,774
Continental	161,477	Superior	338,836	Cities Service	296,125(4)	Occidental	239,440(4)
Sinclair	155,941	Continental	308,060	Conoco	283,970	Superior	234,732
Sunray-DX	151,663(3)	Tenneco	291,529	El Paso	283,000	DuPont	213,160(4)
Tidewater	139,517(3)	El Paso	219,730	Superior	283,000	El Paso	153,000
Union	124,963	Pennzoil-United	215,715	Pennzoil	213,825	Texas Oil & Gas	149,507
Skelly	124,493(3)	Marathon	171,597	Marathon	164,159	U.S. Steel	129,515
Pure	114,614(3)	Amerada Hess	160,892	Columbia	156,698(5)	Pennzoil	118,051
U.S. TOTAL	12,771,038	U.S. TOTAL	21,920,642	U.S. TOTAL	19,602,000	U.S. TOTAL	16,033,000

(1) Natural gas sales.
(2) Gross.
(3) Includes Canadian production.
(4) Volume before extraction of natural gas liquids.
(5) Includes synthetic gas.
(6) Reported on a "dry" gas basis unless otherwise noted.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION(1)
(Millions of Cubic Feet)

1984		1985		1986	
Company	Production	Company	Production	Company	Production
Texaco	964,726(2)	Chevron	765,770	Chevron	718,320
Exxon	907,025	Exxon	761,025	Exxon	700,435
Chevron(3)	903,302	Texaco	755,915(2)	Shell	653,715
Mobil(4)	750,440	Amoco (Std. of Ind.)	682,185	Amoco	631,815
Standard of Ind.	693,500	Mobil	603,345	Texaco	613,930
Shell	589,475	Shell	601,885	Mobil	546,770
Atlantic Richfield	501,462	Atlantic Richfield	434,355	ARCO	454,060
Tenneco	433,601	Tenneco	375,692	Tenneco	364,677
Phillips(5)	372,994	Phillips	319,740	USX (U.S. Steel)(10)	308,042
Unocal	304,666	Unocal	287,255	Phillips	299,300
Sun	286,160	Sun	239,440	Unocal	248,930
Occidental	248,565(6)	DuPont	230,680(6)	DuPont	248,000
DuPont	247,105(6)	Occidental	219,365(6)	Occidental	244,185
Texas Oil & Gas	177,173	Texas Oil and Gas	198,475	Sun	219,000
U.S. Steel(7)	150,937	Consolidated Oil		Burlington Northern(11)	145,000
Pennzoil	144,329	and Gas	150,100	Enron	127,276
Consolidated		Pennzoil	138,438	Union Pacific	122,700
Natural Gas	126,600	U.S. Steel	137,712	Pennzoil	116,760
Columbia	125,462(8)	Union Pacific	115,194	Mesa(12)	112,367
Union Pacific	121,363	Enron Corp.(9)	109,309	Consolidated Natural Gas	112,000
El Paso	107,000	El Paso	107,000		
U.S. TOTAL	17,231,000	U.S. TOTAL	16,428,000	U.S. TOTAL	16,036,000

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(1) Reported on a "dry" gas basis unless otherwise noted.

(2) Sales. Texaco's figure also includes 100% of Getty Oil Company's estimated annualized production. (Texaco acquired Getty on March 1, 1984.)

(3) Standard Oil of California acquired the Gulf Corporation on June 15, 1984, and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure includes 100% of Gulf's annualized production before the extraction of natural gas liquids.

(4) Mobil acquired Superior on September 23, 1984. Mobil's figure includes 100% of Superior's estimated annualized production.

(5) Phillips acquired Aminoil from R.J. Reynolds on October 26, 1984. Phillips' figure includes 100% of Aminoil's estimated annualized production.

(6) Volume before extraction of natural gas liquids.

(7) U.S. Steel acquired the U.S. assets of Husky Oil Ltd. on May 31, 1984. U.S. Steel's figure includes 100% of Husky's estimated annualized production of its U.S. assets.

(8) Includes synthetic gas and liquified petroleum gas.

(9) Formerly HNG/InterNorth, Inc. On June 1, 1985 InterNorth Inc. acquired the Houston Natural Gas Corporation and changed its name to reflect the acquisition. By April 1986 the corporation changed its name to Enron Corporation. Enron's figure includes Houston Natural Gas's 1985 full-year production. Enron's figure also includes cost and non-cost of service production.

(10) On February 11, 1986 a subsidiary of U.S. Steel merged with Texas Oil and Gas Corp. (TXO). On July 8, 1986, in recognition of its major diversification into oil and gas businesses, U.S. Steel changed its name to USX Corporation.

(11) On December 13, 1985 Southland Royalty became a wholly-owned subsidiary of Burlington Northern Inc. (BNI). BNI also is the parent company of El Paso Natural Gas Company.

(12) On June 30, 1986, Mesa acquired the assets of Pioneer Corporation. Mesa's figure includes 100 percent of Pioneer's estimated annualized production.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1986, Discussion paper #014R.

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE
(In Dollars per Thousand Cubic Feet)

State	1967	1968	1969	1970	1971	1972	1973	1974	1975
Alabama	1.13	1.10	1.09	1.13	1.19	1.27	1.37	1.55	1.57
Alaska	1.51	1.52	1.52	1.52	1.53	1.55	1.57	1.58	1.63
Arizona	0.96	0.97	1.04	1.20	1.23	1.24	1.37	1.50	1.53
Arkansas	0.72	0.70	0.71	0.75	0.79	0.83	0.87	1.06	1.12
California	0.93	0.93	0.93	0.99	1.03	1.08	1.16	1.38	1.57
Colorado	0.66	0.68	0.69	0.72	0.75	0.78	0.83	1.00	1.16
Connecticut	1.83	1.81	1.82	1.91	2.07	2.09	2.25	2.79	3.29
Delaware	1.60	1.59	1.50	1.58	1.63	1.71	1.85	2.11	2.43
District of Columbia	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Florida	2.26	2.59	2.48	2.51	2.54	2.66	2.70	2.85	2.74
Georgia	1.03	1.02	1.02	1.05	1.13	1.26	1.30	1.40	1.50
Hawaii	NA	NA	NA	NA	NA	NA	NA	NA	NA
Idaho	1.29	1.36	1.37	1.39	1.49	1.51	1.52	1.80	2.18
Illinois	1.02	1.02	1.00	1.05	1.07	1.13	1.21	1.35	1.61
Indiana	0.98	0.94	0.94	1.01	1.08	1.14	1.20	1.28	1.45
Iowa	0.93	0.93	0.94	0.97	1.03	1.11	1.17	1.22	1.43
Kansas	0.59	0.63	0.64	0.68	0.72	0.74	0.75	0.90	1.03
Kentucky	0.84	0.79	0.80	0.83	0.88	0.93	0.99	1.10	1.23
Louisiana	0.75	0.75	0.75	0.77	0.84	0.91	0.97	1.12	1.37
Maine	1.96(2)	2.05(2)	1.97(2)	1.99(2)	2.05(2)	2.14(2)	2.17(2)	2.38(2)	2.65(2)
Maryland	1.44(3)	1.42(3)	1.42(3)	1.45(3)	1.51(3)	1.65(3)	1.68(3)	0.50(3)	2.33(3)
Massachusetts	1.88	1.86	1.86	1.92	2.12	2.29	2.40	2.71	3.15
Michigan	0.98	0.98	0.98	1.01	1.06	1.10	1.18	1.37	1.62
Minnesota	1.03	1.03	1.07	1.10	1.18	1.23	1.30	1.41	1.57
Mississippi	0.88	0.97	0.88	0.88	0.94	1.08	1.09	1.23	1.41
Missouri	0.84	0.86	0.89	0.96	1.02	1.10	1.16	1.27	1.49
Montana	0.80	0.82	0.88	0.91	0.93	0.97	1.09	1.12	1.30
Nebraska	0.79	0.80	0.83	0.85	0.92	0.99	1.04	1.14	1.28
Nevada	1.42	1.51	1.49	1.51	1.51	1.52	1.54	1.72	1.95
New Hampshire	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
New Jersey	1.91	1.91	1.85	1.89	1.95	2.02	2.08	2.25	2.69
New Mexico	0.91	0.89	0.91	0.93	0.95	0.97	1.00	1.24	1.33
New York	1.42	1.38	1.37	1.40	1.50	1.62	1.74	2.00	2.54
North Carolina	1.31	1.29	1.25	1.30	1.34	1.41	1.51	1.69	2.02
North Dakota	0.94	0.93	0.95	1.02	1.10	1.13	1.14	1.19	1.51
Ohio	0.86	0.85	0.87	0.90	0.98	1.05	1.11	1.24	1.50
Oklahoma	0.78	0.77	0.82	0.84	0.87	0.90	0.92	1.05	1.22
Oregon	1.57	1.54	1.49	1.51	1.60	1.68	1.76	2.00	2.20
Pennsylvania	1.15	1.15	1.18	1.24	1.28	1.36	1.48	1.66	1.93
Rhode Island	1.81	1.78	1.78	1.83	1.93	2.05	2.37	2.55	3.09
South Carolina	1.40	1.32	1.33	1.35	1.47	1.62	1.65	1.97	2.13
South Dakota	0.99	0.99	1.01	1.04	1.10	1.13	1.19	1.29	1.40
Tennessee	0.90	0.88	0.89	0.91	0.98	1.02	1.08	1.17	1.29
Texas	0.87	0.87	0.90	0.92	0.99	1.01	1.04	1.17	1.52
Utah	0.68	0.74	0.83	0.85	0.87	0.90	0.99	1.07	1.22
Vermont	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Virginia	1.46	1.44	1.43	1.49	1.52	1.60	1.68	1.87	2.24
Washington	1.48	1.43	1.36	1.40	1.43	1.47	1.55	1.77	2.27
West Virginia	0.84	0.87	0.88	0.89	0.94	0.96	0.97	1.10	1.45
Wisconsin	1.02	1.10	1.16	1.25	1.26	1.34	1.43	1.50	1.75
Wyoming	0.66	0.67	0.68	0.68	0.71	0.74	0.77	0.85	1.02
TOTAL	1.04	1.04	1.05	1.09	1.15	1.21	1.29	1.43	1.71

NA Not Available
(1) Included in Maryland averages.
(2) Averages include New Hampshire and Vermont.
(3) Averages include the District of Columbia.
(4) Included in Maine averages.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

Section XIII
Table 13a

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE

(In Dollars per Thousand of Cubic Feet)

State	1976	1977	1978	1979	1980	1981	1982	1983	1984
Alabama	1.99	2.31	2.71	3.65	4.04	4.77	5.58	6.22	6.26
Alaska	1.65	1.71	1.76	1.71	1.73	1.95	1.79	2.33	2.49
Arizona	2.12	2.61	3.07	3.50	4.05	4.63	5.92	6.63	7.16
Arkansas	1.23	1.98	1.96	1.57	2.47	3.04	3.82	4.40	4.37
California	1.77	1.89	1.99	2.47	3.51	3.74	4.43	5.41	5.84
Colorado	1.27	1.62	1.94	2.48	3.23	4.17	4.89	5.51	5.24
Connecticut	3.41	4.34	4.47	4.74	5.84	6.85	8.51	9.70	8.80
Delaware	2.61	3.25	4.06	4.03	4.30	5.53	6.04	6.59	6.67
District of Columbia	(1)	(1)	(1)	(1)	4.57	5.50	6.64	8.10	8.05
Florida	2.81	3.53	3.54	3.70	4.80	5.31	6.59	6.85	7.18
Georgia	1.69	1.97	2.33	2.88	3.67	4.34	5.33	6.10	6.41
Hawaii	NA	NA	NA	NA	12.99	15.57	15.70	16.46	17.36
Idaho	2.24	2.86	3.41	3.73	4.97	5.57	6.92	7.38	6.89
Illinois	1.90	2.21	2.50	3.01	3.61	4.05	4.73	5.46	5.37
Indiana	1.69	2.02	2.17	2.65	3.15	3.60	4.38	5.49	5.69
Iowa	1.61	1.93	2.25	2.68	3.19	3.89	4.69	5.52	5.56
Kansas	1.48	1.73	1.77	1.95	2.36	3.03	4.06	4.68	4.49
Kentucky	1.32	1.79	1.94	2.35	3.03	3.49	4.46	5.30	5.20
Louisiana	1.57	1.97	2.47	2.71	3.40	4.15	5.32	6.12	5.96
Maine	2.68(2)	3.62(2)	3.57(2)	4.10(2)	6.34	7.45	8.63	9.82	9.58
Maryland	2.57(3)	3.18(3)	3.40(3)	3.76(3)	4.46	5.07	6.12	7.42	7.44
Massachusetts	3.64	3.95	4.17	4.55	5.42	6.37	7.54	8.32	7.83
Michigan	1.90	2.22	2.31	2.64	3.19	3.84	4.79	5.84	5.97
Minnesota	1.74	2.13	2.41	2.86	3.22	4.09	4.96	5.90	6.00
Mississippi	1.71	2.11	2.40	2.83	3.47	3.99	4.93	5.88	5.52
Missouri	1.70	2.18	2.29	2.75	3.28	4.02	5.20	6.12	5.85
Montana	1.36	1.82	1.89	2.21	3.05	3.75	4.45	4.62	4.86
Nebraska	1.37	1.80	1.97	2.30	2.72	3.45	4.15	4.95	5.09
Nevada	2.04	2.78	2.80	2.83	4.06	4.84	5.56	6.81	6.95
New Hampshire	(4)	(4)	(4)	(4)	4.66	5.68	6.85	7.47	7.02
New Jersey	3.14	3.42	3.53	4.30	5.06	5.87	7.03	7.43	7.30
New Mexico	1.36	2.11	2.50	2.73	3.32	3.86	4.94	5.50	5.90
New York	2.87	3.28	3.68	4.12	4.95	5.50	6.51	7.87	7.64
North Carolina	2.13	2.81	3.00	3.52	4.11	5.17	5.73	6.65	6.68
North Dakota	1.79	2.11	2.33	2.88	3.85	4.28	4.61	5.56	6.38
Ohio	1.77	2.21	2.43	2.81	3.54	3.97	4.96	5.08	6.07
Oklahoma	1.50	1.78	1.93	2.20	2.46	2.94	3.53	4.33	4.56
Oregon	2.68	3.43	3.83	4.12	5.60	6.06	6.92	7.23	7.18
Pennsylvania	2.14	2.51	2.63	3.19	3.80	4.51	5.42	6.44	6.56
Rhode Island	3.36	4.23	4.18	3.67	5.69	6.61	7.95	8.66	7.50
South Carolina	2.29	2.87	3.00	3.50	4.19	4.90	5.51	6.38	6.62
South Dakota	1.50	1.83	2.10	2.61	3.13	3.91	4.71	5.59	6.16
Tennessee	1.61	2.09	2.14	2.37	2.89	3.44	4.32	5.26	5.04
Texas	1.99	2.39	2.73	3.21	3.40	4.20	5.21	5.55	5.82
Utah	1.38	1.64	1.93	2.22	2.74	3.23	3.41	4.26	5.68
Vermont	(4)	(4)	(4)	(4)	6.22	7.00	7.24	6.79	6.30
Virginia	2.54	3.03	3.27	3.71	4.26	4.66	6.02	7.03	6.99
Washington	2.70	3.12	3.48	3.95	5.31	6.02	6.87	6.87	6.84
West Virginia	1.67	2.55	2.61	2.93	3.59	4.24	5.20	6.00	6.12
Wisconsin	2.11	2.50	2.68	3.06	3.83	4.77	5.64	6.48	6.51
Wyoming	1.18	1.59	1.91	2.51	2.81	3.51	4.53	5.13	5.84
TOTAL	1.98	2.35	2.56	2.98	3.68	4.29	5.17	6.06	6.12

NA Not Available
(1) Included with Maryland averages.
(2) Averages include New Hampshire and Vermont.
(3) Averages include the District of Columbia.
(4) Included in Maine averages.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

Section XIII
Table 13b

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE
(In Dollars per Thousand Cubic Feet)

State	1985	1986
Alabama	6.41	6.42
Alaska	2.81	3.25
Arizona	7.00	6.28
Arkansas	4.43	4.83
California	5.72	5.14
Colorado	5.10	5.01
Connecticut	9.15	8.83
Delaware	7.06	7.09
District of Columbia	7.91	7.52
Florida	7.46	7.20
Georgia	6.60	6.63
Hawaii	18.12	16.09
Idaho	6.89	6.02
Illinois	5.55	5.07
Indiana	5.54	5.52
Iowa	5.39	5.12
Kansas	4.12	3.89
Kentucky	5.31	4.93
Louisiana	5.67	5.77
Maine	9.07	8.51
Maryland	7.25	6.88
Massachusetts	7.83	7.41
Michigan	6.29	5.74
Minnesota	5.80	5.28
Mississippi	5.46	5.59
Missouri	5.49	5.03
Montana	4.81	4.45
Nebraska	5.01	4.59
Nevada	7.04	5.96
New Hampshire	7.15	7.07
New Jersey	7.49	7.35
New Mexico	6.08	5.72
New York	7.74	7.46
North Carolina	6.60	6.62
North Dakota	5.59	5.29
Ohio	6.04	5.80
Oklahoma	4.58	5.01
Oregon	6.93	6.61
Pennsylvania	6.72	6.39
Rhode Island	7.87	7.46
South Carolina	6.62	6.54
South Dakota	5.75	5.26
Tennessee	5.12	4.97
Texas	5.77	5.31
Utah	4.86	4.64
Vermont	6.28	6.28
Virginia	7.02	6.49
Washington	6.60	5.93
West Virginia	6.39	6.34
Wisconsin	6.47	6.20
Wyoming	5.17	4.93
TOTAL	6.12	5.83

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annual.

HISTORICAL U.S. GROSS AND MARKETED PRODUCTION OF NATURAL GAS: 1935-1946
(Millions of Cubic Feet)

Year	Gross Production	Repressuring	Vented and Flared(1)	Marketed Production(2)
1935	2,498,005	90,290	479,826	1,927,889
1936	2,633,835	73,507	392,528	2,178,800
1937	3,032,410	84,925	526,159	2,421,326
1938	3,061,200	101,551	649,106	2,310,543
1939	3,333,500	171,401	677,311	2,484,788
1940	3,694,100	362,916	655,967	2,675,217
1941	4,103,500	644,379	630,212	2,828,909
1942	4,453,900	752,619	626,782	3,074,499
1943	5,160,650	824,803	902,115	3,433,642
1944	5,614,220	882,979	1,010,285	3,720,956
1945	5,902,180	1,061,951	896,208	3,944,021
1946	6,190,200	1,038,242	1,102,033	4,049,925

(1) Partly estimated; includes direct losses on producing properties and residue blown to the air.
(2) Marketed production equals gross production, less amounts used for repressuring, vented and flared.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys, "Natural Gas" Annuals.

BASIC PETROLEUM DATA BOOK

SECTION XIV. OPEC

Table 1. OPEC Crude Oil Reserves

Table 2 OPEC Crude Oil Production

Table 3. U.S. Total Petroleum Imports From OPEC Nations

Table 4. U.S. Crude Oil Imports From OPEC Nations

Table 5. OPEC Refinery Capacity

Table 6. OPEC's Values of Petroleum Exports

Table 7. OPEC Marketed Production of Natural Gas

Section XIV
Table 1

OPEC CRUDE OIL RESERVES
ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC
1960	50,000	62,000	6,500	35,000	25,000	18,000	-	-	-	-	-	-	-	-	196,500
1961	50,000	62,000	6,000	35,000	27,000	18,500	2,500	-	-	-	-	-	-	-	201,000
1962	52,000	62,000	6,000	35,000	26,500	17,550	2,750	3,000	9,500	-	-	-	-	-	214,300
1963	52,000	63,000	7,500	37,000	26,000	17,000	3,000	4,500	10,000	-	-	-	-	-	220,000
1964	60,000	63,500	10,000	37,000	25,500	17,000	2,950	7,000	10,000	-	-	-	-	-	232,950
1965	60,500	63,000	12,500	38,000	25,000	17,000	3,500	9,000	10,000	-	-	-	-	-	238,500
1966	60,000	62,500	12,400	40,000	25,000	17,250	3,000	10,000	9,500	-	-	-	-	-	239,650
1967	66,000	68,700	13,000	44,200	24,000	17,400	4,000	20,000	9,100	12,500	-	-	-	-	278,900
1968	74,700	70,000	13,500	43,800	23,500	17,000	3,750	29,200	9,000	15,000	-	-	-	-	299,450
1969	77,000	69,000	15,000	54,000	28,000	15,500	3,875	30,000	8,850	18,000	7,000	-	-	-	326,225
1970	140,000	68,000	13,000	55,000	27,500	14,750	5,500	35,000	9,000	16,000	8,000	-	-	-	391,750
1971	128,500	67,100	25,700	70,000	32,000	14,000	4,300	29,200	10,000	11,800	30,000(10)	9,300	-	-	431,900
1972	145,300	66,023	24,350	55,500	35,900	13,900	6,000	25,000	10,400	18,948	12,250	11,680	-	-	425,251
1973	138,000	64,900	16,000	65,000	29,000	13,700	7,000	30,400	10,005	20,768	47,000	15,000	5,750	1,100	463,623
1974	132,000	64,000	17,500	60,000	31,500	14,000	6,500	25,500	10,500	25,500	7,640	20,000	5,675	1,500	421,815
1975	164,500	72,800	17,300	66,000	35,000	15,000	6,000	26,600	15,000	33,920	7,700	20,900	2,500	1,750	484,970
1976	148,600	68,000	6,400	64,500	34,300	17,700	5,850	26,100	14,000	32,200	7,370	20,200	2,450	2,200	449,879
1977	151,400	67,400	6,300	63,000	34,000	15,270	5,700	25,500	10,500	31,200	6,800	19,500	1,700	2,125	440,395
1978	150,000	67,000	6,200	62,000	34,500	18,200	5,600	25,000	10,000	32,425	6,600	18,700	1,640	2,050	439,915
1979	165,700	66,200	6,480	59,000	32,100	18,000	4,000	24,300	10,200	31,316	6,300	18,200	1,170	1,970	444,936
1980	163,350	65,400	6,260	58,000	31,000	17,870	3,760	23,500	9,600	29,411	8,440	17,400	1,100	500	435,591
1981	165,000	64,900	6,060	57,500	30,000	17,950	3,585	23,000	9,500	30,410	8,200	16,700	1,100	450	434,355
1982	164,600	64,480	6,500	57,000	29,700	20,300	3,434	22,600	9,800	32,176	8,080	16,500	850	480	436,500
1983	162,400	64,230	5,840	55,308	41,000	21,500	3,425	21,500	9,550	32,354	9,440	16,750	1,400	460	445,157
1984	166,000	63,900	5,695	51,000	43,000	24,850	3,330	21,370	9,100	32,240	9,220	16,550	1,675	490	448,320
1985	169,000	90,000	5,420	48,500	44,500	25,845	3,350	21,100	8,650	32,390	9,000	16,650	1,400	510	476,215
1986	168,800	89,774	5,380	47,876	44,110	25,591	3,300	21,300	8,500	32,890	8,820	16,600	1,650	520	475,110
1987	166,574	91,916	5,212	48,800	47,100	25,500	3,154	21,300	8,300	33,050	8,800	16,000	1,672	645	478,023
1988	166,980	91,920	5,210	92,850	100,000	56,300	3,150	21,000	8,400	97,705	8,500	15,980	1,615	645	670,250

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(1) Original member 1960.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on a 50-50 basis.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. Figures reflect only Abu Dhabi reserves until 1974 when membership was transferred to the United Arab Emirates which includes Dubai and Sharjah.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Government estimate

SOURCE:" Oil and Gas Journal, "Worldwide Report" issue

Section XIV
Table 2

OPEC CRUDE OIL PRODUCTION
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC
1960	1,247	1,624	136	1,054	967	2,846	-	-	-	-	-	-	-	-	7,874
1961	1,393	1,644	179	1,183	1,002	2,920	176	-	-	-	-	-	-	-	8,497
1962	1,521	1,834	244	1,320	1,005	3,200	186	184	460	-	-	-	-	-	9,954
1963	1,629	1,933	314	1,474	1,159	3,248	192	464	452	-	-	-	-	-	10,865
1964	1,716	2,117	359	1,691	1,262	3,393	213	862	469	-	-	-	-	-	12,082
1965	2,025	2,170	362	1,886	1,322	3,473	231	1,220	488	-	-	-	-	-	13,177
1966	2,393	2,275	420	2,113	1,385	3,371	290	1,507	463	-	-	-	-	-	14,217
1967	2,598	2,292	415	2,596	1,228	3,542	324	1,744	507	384	-	-	-	-	15,631
1968	2,830	2,421	428	2,840	1,499	3,605	340	2,599	601	497	-	-	-	-	17,660
1969	2,993	2,575	447	3,375	1,521	3,649	383	3,111	742	599	946	-	-	-	20,341
1970	3,549	2,735	504	3,829	1,558	3,708	363	3,313	854	691	1,030	-	-	-	22,134
1971	4,498	2,925	545	4,553	1,710	3,549	429	2,761	892	934	766	1,530	-	-	25,092
1972	5,733	2,999	566	5,024	1,447	3,220	482	2,239	1,081	1,050	1,052	1,818	-	-	26,711
1973	7,335	2,759	523	5,861	2,018	3,366	570	2,175	1,338	1,533	1,097	2,054	209	151	30,989
1974	8,210	2,276	543	6,022	1,975	2,976	519	1,521	1,375	1,689	1,009	2,256	174	202	30,747
1975	6,827	1,838	496	5,350	2,262	2,346	437	1,510	1,307	1,694	961	1,786	161	225	27,200
1976	8,344	1,913	469	5,924	2,281	2,294	487	1,924	1,504	1,891	1,049	2,066	188	224	30,558
1977	9,014	1,783	372	5,699	2,493	2,238	445	2,064	1,685	1,999	1,123	2,097	183	222	31,417
1978	8,530	1,865	466	5,207	2,629	2,166	484	1,993	1,637	1,832	1,225	1,910	202	225	30,371
1979	9,251	2,213	568	3,168	3,477	2,356	508	2,092	1,591	1,831	1,137	2,302	214	203	30,911
1980	9,631	1,389	544	1,662	2,514	2,165	471	1,830	1,576	1,702	1,020	2,058	204	175	26,941
1981	9,625	947	370	1,381	993	2,108	405	1,137	1,604	1,500	803	1,445	211	151	22,680
1982	6,327	663	317	2,282	972	1,893	328	1,183	1,314	1,248	701	1,298	211	154	18,891
1983	4,867	881	390	2,492	922	1,781	295	1,076	1,385	1,119	699	1,241	236	157	17,541
1984	4,444	912	410	2,187	1,203	1,813	399	1,073	1,466	1,097	638	1,393	253	152	17,440
1985	3,290	862	355	2,258	1,437	1,621	302	1,069	1,235	1,146	645	1,464	280	153	16,117
1986	4,918	1,344	332	1,946	1,716	1,576	342	1,137	1,264	1,331	671	1,461	289	180	18,507

(1) Original member 1960.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on a 50-50 basis.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. Figures reflect only Abu Dhabi production until 1974 when membership was transferred to the United Arab Emirates which includes Dubai and Sharjah.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.

Source: U.S. Energy Information Administration
1979-1986: CIA, International Energy Statistical Review

U.S. TOTAL PETROLEUM IMPORTS FROM OPEC NATIONS
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC	Total U.S. Petroleum Imports
1960	79	146	45	36	17	832	-	-	-	8	-	-	-	-	1,155	1,815
1961	69	130	53	60	25	800	36	-	-	-	-	-	-	-	1,173	1,917
1962	73	120	43	49	2	907	27	19	67	-	-	-	-	-	1,307	2,082
1963	86	89	44	62	1	899	17	19	59	-	-	-	-	-	1,276	2,123
1964	106	69	48	66	-	931	20	39	63	-	-	-	-	-	1,342	2,258
1965	144	60	27	79	16	994	13	41	61	-	-	-	-	-	1,435	2,468
1966	135	31	19	89	26	1,021	1	69	50	-	-	-	-	-	1,441	2,573
1967	86	23	11	71	5	935	-	42	62	5	-	-	-	-	1,240	2,537
1968	60	48	29	61	-	888	-	114	73	15	-	-	-	-	1,288	2,840
1969	42	39	43	46	-	876	1	135	89	14	2	-	-	-	1,287	3,166
1970	42	36	-	38	-	989	-	47	70	63	8	-	-	-	1,293	3,419
1971	127	36	-	112	11	1,019	-	57	111	80	15	103	-	-	1,671	3,925
1972	190	45	-	142	4	960	3	123	164	73	92	251	-	-	2,047	4,741
1973	486	47	-	223	4	1,135	7	164	213	71	135	459	48	-	2,992	6,256
1974	461	5	-	469	-	979	17	4	300	74	190	713	42	23	3,277	6,112
1975	715	15	-	280	3	698	18	232	388	117	282	762	57	27	3,594	6,025
1976	1,230	5	-	298	26	699	24	453	539	254	432	1,025	51	28	5,064	7,295
1977	1,380	48	-	535	73	690	67	723	541	335	559	1,143	57	42	6,193	8,807
1978	1,144	6	-	555	62	645	64	654	573	385	649	919	54	41	5,751	8,363
1979	1,356	8	-	304	88	690	31	658	420	281	636	1,080	42	42	5,636	8,456
1980	1,261	25	-	9	28	481	22	554	348	172	488	857	27	26	4,298	6,909
1981	1,129	-	-	-	(10)	406	7	319	366	81	311	620	48	35	3,324	5,996
1982	552	5	-	35	3	412	7	26	248	92	170	514	42	40	2,145	5,113
1983	337	14	-	48	10	422	-	-	338	30	240	302	61	59	1,863	5,051
1984	325	36	-	10	12	548	5	1	343	117	323	216	55	58	2,049	5,437
1985	168	21	-	27	46	605	-	4	314	45	187	293	67	52	1,830	5,067
1986	685	68	-	19	81	793	13	-	318	44	271	440	77	26	2,836	6,224
1987	751	84	-	98	83	804	-	-	285	61	295	535	29	35	3,061	6,678

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(1) Original member 1960.
(2) In 1969, Saudi Arabia and Kuwait agreed to a boundary for administration of the Neutral Zone which had been in dispute until that time. Natural resources from the area were to be shared equally.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. In 1972, Abu Dhabi together with Dubai, Sharjah and several other sheikdoms formed the United Arab Emirates. Abu Dhabi's membership in OPEC was transferred to the other members of the U.A.E. in 1974.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Less than 500 barrels per day.

Source: U.S. Energy Information Administration. P.A.D. District Supply/Disposition Annual
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals

Section XIV
Table 4

U.S. CRUDE OIL IMPORTS FROM OPEC NATIONS
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC	Total U.S. Crude Oil Imports
1960	77	130	45	36	17	472	-	-	-	-	-	-	-	-	777	1,015
1961	62	121	53	60	20	427	10	-	-	-	-	-	-	-	753	1,045
1962	67	112	43	49	2	463	26	18	67	-	-	-	-	-	847	1,126
1963	79	81	44	62	1	478	16	19	59	-	-	-	-	-	839	1,131
1964	97	64	48	66	-	476	20	39	63	-	-	-	-	-	873	1,198
1965	132	55	27	78	16	432	12	41	61	-	-	-	-	-	854	1,238
1966	126	26	19	84	26	404	1	69	50	-	-	-	-	-	805	1,225
1967	81	19	11	65	5	359	-	42	62	5	-	-	-	-	649	1,128
1968	52	43	29	58	-	344	-	114	73	15	-	-	-	-	728	1,290
1969	35	34	43	42	-	306	1	134	89	14	1	-	-	-	699	1,490
1970	40	33	-	33	-	268	-	47	70	63	6	-	-	-	560	1,324
1971	115	29	-	106	11	303	-	53	110	80	13	95	-	-	915	1,681
1972	174	36	-	136	4	255	3	109	163	73	87	243	-	-	1,283	2,216
1973	462	42	-	217	4	344	7	133	200	71	119	448	47	-	2,094	3,244
1974	438	5	-	463	-	319	17	4	284	69	180	697	42	23	2,541	3,477
1975	701	4	-	278	2	395	18	223	379	117	264	746	57	27	3,211	4,105
1976	1,222	1	-	298	26	241	24	444	536	255	408	1,014	51	26	4,546	5,287
1977	1,369	42	-	525	76	249	67	696	502	331	538	1,123	54	35	5,607	6,568
1978	1,142	5	-	554	62	181	64	638	533	385	634	910	38	38	5,184	6,356
1979	1,347	5	-	297	88	293	31	642	380	281	608	1,069	30	42	5,113	6,519
1980	1,250	27	-	8	28	156	22	548	314	172	456	841	17	25	3,864	5,263
1981	1,112	-	-	-	-	147	7	317	318	77	261	611	38	35	2,922	4,396
1982	530	2	-	35	3	155	7	23	226	81	90	510	32	40	1,734	3,488
1983	321	7	-	48	10	164	-	-	315	18	176	301	56	59	1,477	3,329
1984	309	24	-	10	12	253	4	-	304	90	194	207	47	57	1,511	3,426
1985	132	4	-	27	46	306	-	-	292	35	84	280	56	51	1,312	3,201
1986	618	28	-	19	81	416	12	-	297	38	78	437	64	25	2,113	4,178
1987	642	70	-	98	82	488	-	-	262	56	115	529	23	35	2,400	4,674

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(1) Original member 1960.
(2) In 1969, Saudi Arabia and Kuwait agreed to a boundary for administration of the Neutral Zone which had been in dispute until that time. Natural resources from the area were to be shared equally.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. In 1972, Abu Dhabi together with Dubai, Sharjah and several other sheikdoms formed the United Arab Emirates. Abu Dhabi's membership in OPEC was transferred to the other members of the U.A.E. in 1974.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Includes crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Energy Information Administration, Petroleum Statement, Annual and December issues
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals

Section XIV
Table 5

OPEC REFINERY CAPACITY
(Thousands of Barrels per Day)

Country	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Algeria	43.7	57.5	57.5	57.5	57.5	57.5	57.5	115.8	115.8	115.8	115.8	115.8
Ecuador	18.2	10.9	19.4	34.5	34.5	34.5	35.5	35.5	35.5	43.9	43.9	43.9
Gabon	--	--	11.9	11.9	14.0	16.0	17.0	17.0	17.0	17.0	20.0	44.0
Indonesia	236.9	241.4	251.2	251.2	256.0	283.5	361.3	361.3	361.3	361.3	361.3	473.4
Iran	466.5	524.2	524.2	594.0	594.0	594.0	605.0	605.0	660.0	690.0	810.0	810.0
Iraq	81.7	81.7	97.7	102.7	102.7	115.7	115.7	115.7	183.5	253.5	253.5	253.5
Kuwait	342.0	342.0	342.0	437.0	437.0	437.0	437.0	484.5	541.5	541.5	609.0	609.0
Libya	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	63.0	63.0	63.0
Nigeria	30.3	30.3	40.0	40.0	40.0	52.1	54.0	54.0	54.0	54.0	54.0	54.0
Qatar	.6	.7	.7	.7	.7	.7	.7	.7	.7	.7	9.7	9.7
Saudi Arabia	302.5	335.0	335.0	347.0	347.0	676.0	676.0	676.0	676.0	676.0	703.0	703.0
United Arab Emirates	--	--	--	--	--	--	--	--	--	--	--	15.0
Venezuela	1,119.8	1,134.5	1,216.8	1,222.2	1,258.0	1,289.4	1,294.9	1,473.9	1,473.9	1,444.9	1,444.9	1,444.9
TOTAL OPEC	2,651.2	2,767.2	2,905.4	3,107.7	3,150.4	3,565.4	3,663.6	3,948.4	4,128.2	4,290.6	4,488.1	4,637.7

Source: OPEC Annual Statistical Bulletin

OPEC REFINERY CAPACITY
(Thousands of Barrels per Day)

Country	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Algeria	115.8	115.8	135.1	471.2	471.2	471.2	471.2	471.2	471.2	471.2
Ecuador	99.5	99.5	94.5	94.5	94.5	94.5	94.6	94.6	94.6	94.6
Gabon	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	21.0
Indonesia	473.4	473.4	473.4	473.4	473.4	473.4	837.0	837.0	837.0	837.0
Iran	1,050.0	1,080.0	1,080.0	1,320.0	1,320.0	670.0	670.0	615.0	615.0	615.0
Iraq	253.5	295.5	305.5	305.5	305.5	215.5	365.5	365.5	365.5	365.5
Kuwait	594.0	594.0	594.0	594.0	594.0	594.0	614.0	614.0	614.0	720.0
Libya	117.0	117.0	117.0	117.0	117.0	117.0	117.0	315.0	333.0	342.0
Nigeria	54.0	144.0	144.0	234.0	234.0	234.0	234.0	234.0	234.0	243.0
Qatar	9.7	9.7	10.5	10.5	10.5	12.2	62.2	62.2	63.0	63.0
Saudi Arabia	703.0	758.0	758.0	645.0	765.0	765.0	935.0	1,190.0	1,440.0	1,490.0
United Arab Emirates	13.5	13.5	13.5	13.5	121.5	121.5	175.5	162.0	162.0	162.0
Venezuela	1,444.9	1,444.9	1,444.9	1,444.9	1,444.9	1,323.1	1,323.1	1,224.2	1,229.2	1,224.2
TOTAL OPEC	4,972.3	5,189.3	5,214.4	5,767.5	5,995.5	5,136.2	5,943.9	6,229.5	6,479.5	6,648.5

Source: OPEC Annual Statistical Bulletin 1986.

Section XIV
Table 6

OPEC`S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1966	1967	1968	1969	1970	1971	1972	1973	1974
Algeria	$ 508	$ 532	$ 589	$ 631	$ 681	$ 614	$ 1,028	$ 1,522	$ 4,267
Ecuador	1	1	1	1	1	1	59	282	693
Gabon	14	32	38	53	58	82	93	196	709
Indonesia	203	240	298	383	446	565	913	1,609	5,211
Iran	1,148	1,748	1,688	1,857	2,358	3,494	3,636	5,617	20,904
Iraq	698	610	755	769	788	1,083	1,027	1,842	6,534
Kuwait	808	803	860	910	1,596	2,143	2,370	3,520	10,394
Libya	1,002	1,169	1,857	2,159	2,357	2,699	2,888	3,919	8,175
Nigeria	260	204	104	367	715	1,342	1,796	2,905	8,619
Qatar	180	202	211	223	228	302	382	601	1,979
Saudi Arabia	1,298	1,384	2,020	2,107	2,418	3,803	5,477	8,956	35,476
United Arab Emirates	247	258	342	412	485	801	1,035	1,740	6,306
Venezuela	2,190	2,307	2,330	2,279	2,371	2,882	2,857	4,329	10,548
TOTAL OPEC	8,558	9,491	11,093	12,152	14,501	19,811	23,561	37,035	119,814

Source: OPEC Annual Statistical Bulletin 1986.

OPEC REVENUES FROM OIL
(Millions of Dollars)

Country	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Algeria	$ 4,295	$ 4,791	$ 5,562	$ 5,856	$ 8,746	$ 12,647	$ 12,985	$ 10,770	$ 9,467	$ 9,189
Ecuador	516	565	500	604	1,161	1,563	1,709	1,509	1,733	1,835
Gabon	841	950	927	975	1,265	1,876	1,723	1,720	1,500	1,767
Indonesia	5,310	6,004	7,298	7,439	8,871	15,595	18,164	15,223	13,558	12,477
Iran	19,634	22,923	23,599	21,684	19,186	13,386	12,053	19,233	19,225	12,255
Iraq	8,227	9,201	9,560	10,913	21,382	26,296	10,422	10,104	9,900	11,992
Kuwait	8,424	8,953	8,778	9,422	16,770	17,678	13,790	8,827	9,948	10,889
Libya	6,677	9,399	11,220	9,681	15,693	21,396	14,531	13,250	11,905	10,739
Nigeria	7,569	9,943	11,046	8,986	16,303	25,277	17,582	12,835	10,231	11,712
Qatar	1,757	2,137	1,987	2,295	3,658	5,428	5,372	4,125	3,123	4,287
Saudi Arabia	29,473	38,157	43,308	40,332	62,855	108,174	118,998	78,119	44,832	36,263
United Arab Emirates	6,807	8,384	9,290	8,675	12,913	19,496	19,270	16,837	13,811	13,677
Venezuela	8,324	8,763	9,110	8,740	13,633	18,248	19,039	15,625	13,839	12,145
TOTAL OPEC	107,854	130,170	142,185	135,602	202,433	286,959	265,637	208,177	163,069	149,226

Source: OPEC Annual Statistical Bulletin 1986.

OPEC'S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1985	1986
Algeria	$ 9,170	$ 3,760
Ecuador	1,927	983
Gabon	1,668	848
Indonesia	9,083	5,451
Iran	13,115	6,600
Iraq	11,380	6,980
Kuwait	9,729	6,200
Libya	10,520	4,700
Nigeria	12,338	6,300
Qatar	3,355	1,460
Saudi Arabia	25,936	21,190
United Arab Emirates	13,395	5,890
Venezuela	10,352	6,713
TOTAL OPEC	131,967	77,073

Source: OPEC Annual Statistical Bulletin 1986.

Section XIV
Table 7

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Algeria	1,780	1,961	2,128	2,357	2,972	2,599	6,573	4,092	3,196	3,807	7,516
Ecuador	--	--	--	14	14	14	14	17	28	28	31
Gabon	11	11	17	24	22	32	31	34	283	637	262
Indonesia	3,156	510	623	633	1,193	1,239	1,253	1,229	800	1,127	2,322
Iran	1,242	1,404	2,850	4,370	4,944	12,881	14,278	16,342	17,789	20,661	20,282
Iraq	498	607	484	485	762	784	925	935	910	836	1,299
Kuwait	1,817	2,380	2,780	3,339	3,727	2,037	2,104	2,487	2,786	2,931	3,212
Libya	--	--	--	--	--	294	708	2,832	4,531	4,075	4,635
Nigeria	98	176	181	147	64	111	184	273	303	404	402
Qatar	81	82	113	514	852	1,005	1,005	1,103	1,580	1,298	2,003
Saudi Arabia	1,031	1,133	1,136	1,639	1,744	1,230	1,378	1,178	2,316	3,835	3,772
United Arab Emirates	--	--	454	600	569	756	1,045	1,038	1,251	1,199	1,090
Venezuela	7,034	5,983	6,300	6,850	7,065	7,710	7,472	7,427	9,149	9,669	9,404
TOTAL OPEC	16,748	14,247	16,994	20,972	23,928	30,692	36,970	38,987	44,922	50,507	56,230

SOURCE: OPEC Annual Statistical Bulletin

Section XIV
Table 7a

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Algeria	7,585	5,738	8,078	15,548	11,647	21,862	26,686	36,267	35,039	36,470
Ecuador	31	40	40	35	31	55	73	85	81	78
Gabon	169	177	165	150	159	143	150	118	71	80
Indonesia	2,338	5,652	10,865	15,765	18,503	18,775	19,076	21,992	32,969	34,810
Iran	19,997	18,852	16,948	17,913	7,138	5,950	7,200	11,000	13,500	14,600
Iraq	1,802	1,178	1,221	1,751	1,281	620	680	470	590	850
Kuwait	3,864	4,213	4,721	6,251	4,071	4,684	3,675	4,035	4,376	4,200
Libya	4,779	5,051	5,121	6,785	5,170	3,150	3,350	3,710	4,600	5,200
Nigeria	632	500	380	1,378	1,070	2,155	1,413	2,298	2,051	2,800
Qatar	1,094	1,551	1,479	4,362	4,741	4,323	5,055	5,235	5,930	5,460
Saudi Arabia	4,434	5,565	7,297	9,167	11,431	22,245	8,950	4,380	18,200	18,800
United Arab Emirates	1,371	3,796	5,164	5,431	6,863	9,075	8,320	8,400	11,060	13,210
Venezuela	11,658	12,729	12,523	14,382	14,805	14,886	15,883	15,640	17,300	17,326
TOTAL OPEC	59,754	65,042	74,002	98,918	86,910	107,923	100,511	113,630	145,767	153,884

Source: OPEC Annual Statistical Bulletin 1986.

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1986
Algeria	40,000
Ecuador	80
Gabon	90
Indonesia	36,290
Iran	15,200
Iraq	1,320
Kuwait	4,900
Libya	6,300
Nigeria	3,299
Qatar	5,480
Saudi Arabia	25,200
United Arab Emirates	15,180
Venezuela	19,074
TOTAL OPEC	172,413

Source: OPEC Annual Statistical Bulletin 1986.

BASIC PETROLEUM DATA BOOK

SECTION XV. MISCELLANEOUS

Table 1. Estimated Average Number of Employees in Important Segments of the Petroleum Industry
Table 2. U.S. Service Station Population by State
Table 3. Conversion Table
Table 4. Heat Values for Various Energy Products
Table 5. U.S. Petroleum Industry Injury Frequency Rates by Industry Sector
Table 6. U.S. Acreage Under Lease for Oil and Gas Production
Table 7. Map--Petroleum Administration for Defense (PAD) Districts
Table 8. Heating Equipment and Fuels for Occupied Housing Units

Section XV
Table 1

ESTIMATED AVERAGE NUMBER OF EMPLOYEES IN IMPORTANT SEGMENTS OF THE PETROLEUM INDUSTRY IN 1987

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Alabama	1,312	423	100	83	3,123	5,116	7,951	18,108
Alaska	8,063	261	0	922	244	530	1,069	11,089
Arizona	105	NA	NA	122	1,866	1,311	8,662	12,066
Arkansas	2,576	NA	NA	NA	2,154	2,795	5,330	12,855
California	32,282	24,007	863	1,184	11,455	14,999	63,918	148,708
Colorado	14,300	586	1,004	92	2,036	2,216	8,271	28,505
Connecticut	150	NA	88	NA	1,290	1,600	9,364	12,492
Delaware	0	772	9	4	316	268	1,475	2,844
Florida	680	46	207	70	2,140	6,630	29,777	39,550
Georgia	71	94	137	466	4,161	5,829	17,508	28,26[illegible]
Hawaii	NA	432	0	0	343	591	3,615	4,981
Idaho	18	0	0	16	332	1,401	3,051	4,818
Illinois	3,799	8,074	271	891	7,865	9,408	25,922	56,230
Indiana	599	2,316	295	410	2,946	3,284	17,537	27,387
Iowa	29	0	53	154	1,265	3,155	12,256	16,912
Kansas	9,733	2,302	365	1,820	2,896	2,247	8,543	27,906
Kentucky	2,290	3,683	114	140	3,241	3,055	10,374	22,897
Louisiana	51,600	11,200	800	1,000	6,200	5,300	7,600	83,700
Maine	NA	0	0	NA	NA	1,329	3,297	4,626
Maryland	35	NA	NA	0	NA	2,675	13,450	16,160
Massachusetts	290	NA	377	NA	4,957	2,694	15,708	24,026
Michigan	4,216	1,615	781	279	6,811	5,829	23,367	42,898
Minnesota	NA	NA	157	194	2,257	2,580	16,606	21,794
Mississippi	5,359	1,534	112	0	2,124	2,964	5,905	17,998
Missouri	63	11	411	230	4,867	6,020	19,056	30,658
Montana	2,010	765	1	78	289	1,262	3,144	7,549
Nebraska	592	NA	NA	102	2,246	1,895	6,683	11,518
Nevada	222	26	0	26	738	453	3,831	5,296
New Hampshire	1	0	3	3	260	460	2,813	3,540
New Jersey	148	6,248	983	162	2,265	3,727	18,872	32,405
New Mexico	8,893	647	32	361	3,077	2,195	4,053	19,258
New York	1,785	5,673	407	124	6,716	8,845	28,076	51,626
North Carolina	5	NA	224	121	2,665	5,905	10,888	19,808
North Dakota	2,601	221	147	158	1,045	2,210	2,390	8,772
Ohio	7,159	5,336	785	675	7,382	6,646	30,253	58,236
Oklahoma	43,438	6,635	439	1,375	5,293	4,299	7,090	68,569
Oregon	87	NA	NA	NA	NA	2,451	8,801	11,430
Pennsylvania	4,100	8,200	800	700	8,500	9,900	27,300	59,500
Rhode Island	7	NA	NA	NA	901	409	2,383	3,700
South Carolina	31	0	NA	NA	574	3,737	7,685	12,027
South Dakota	100	0	0	64	126	1,528	2,606	4,424
Tennessee	351	338	128	42	1,824	5,225	11,892	19,800

Section XV
Table 1a

ESTIMATED AVERAGE NUMBER OF EMPLOYEES IN IMPORTANT SEGMENTS OF THE PETROLEUM INDUSTRY IN 1985

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Texas	171,253	29,665	1,147	4,708	26,710	23,101	34,045	290,629
Utah	1,903	778	11	79	2,307	1,676	5,080	11,534
Vermont	0	0	0	0	103	430	2,067	2,600
Virginia	NA	NA	55	NA	3,012	8,335	15,482	26,884
Washington	191	1,571	NA	79	NA	2,692	10,347	14,880
West Virginia	4,298	435	114	197	4,837	1,495	4,844	16,120
Wisconsin	11	136	73	164	2,848	3,343	16,455	23,030
Wyoming	8,866	905	6	241	1,065	1,030	2,894	15,007
District of Columbia	68	69	0	0	599	150	906	1,792
Total U.S.	395,690	125,095	11,499	17,436	160,271	196,925	610,492	1,517,408

NA Not Available

Note: The above estimates represent results of the Independent Petroleum Association of America's survey of State Labor Departments. The totals of these individual state estimates do not agree with totals shown by the Bureau of Labor Statistics in its "Employment and Earnings" publication due to confidentiality rules.

Section XV
Table 2

U.S. SERVICE STATION POPULATION BY STATE

	1977(1)	1980	1981	1982(1)	1983	1984	1985	1986	1987
Alabama	3,562	3,198	3,051	2,001	1,889	1,827	1,722	1,660	1,617
Alaska	211	188	179	176	166	161	152	146	142
Arizona	1,656	1,486	1,418	1,204	1,137	1,099	1,036	1,006	973
Arkansas	2,407	2,161	2,062	1,216	1,148	1,110	1,047	999	983
California	14,388	12,916	12,320	10,624	10,029	9,698	9,145	8,814	8,585
Colorado	2,485	2,230	2,127	1,570	1,482	1,433	1,351	1,302	1,269
Connecticut	2,215	1,988	1,897	1,726	1,629	1,576	1,486	1,432	1,395
Delaware	435	391	373	300	283	274	258	249	242
Dist. of Col.	250	224	214	158	149	144	136	131	128
Florida	7,287	6,541	6,240	5,504	5,196	5,024	4,738	4,566	4,448
Georgia	5,066	4,546	4,337	3,077	2,905	2,809	2,649	2,553	2,487
Hawaii	415	372	355	367	346	335	316	304	297
Idaho	830	745	711	494	466	451	425	410	399
Illinois	7,815	7,014	6,691	5,132	4,845	4,685	4,418	4,258	4,147
Indiana	4,867	4,348	4,148	3,167	2,990	2,891	2,726	2,627	2,559
Iowa	3,424	3,074	2,933	2,064	1,948	1,884	1,777	1,712	1,668
Kansas	2,466	2,214	2,112	1,511	1,426	1,379	1,301	1,254	1,221
Kentucky	3,452	3,099	2,956	2,119	2,000	1,934	1,824	1,758	1,712
Louisiana	2,989	2,683	2,560	1,972	1,862	1,800	1,698	1,636	1,594
Maine	933	838	799	640	604	584	551	531	517
Maryland	2,465	2,213	2,111	1,877	1,772	1,713	1,616	1,557	1,517
Massachusetts	3,882	3,484	3,324	2,962	2,796	2,704	2,550	2,457	2,394
Michigan	6,572	5,899	5,628	4,130	3,899	3,770	3,555	3,426	3,337
Minnesota	3,280	2,944	2,809	2,228	2,103	2,034	1,918	1,848	1,800
Mississippi	1,962	1,761	1,680	1,191	1,124	1,087	1,025	988	962
Missouri	5,008	4,497	4,290	2,944	2,779	2,687	2,534	2,442	2,379
Montana	968	868	828	528	498	482	455	438	427
Nebraska	1,732	1,555	1,483	1,129	1,066	1,031	972	937	912
Nevada	641	575	549	476	449	435	410	395	385
New Hampshire	704	632	603	547	516	499	471	454	442
New Jersey	5,350	4,802	4,581	4,157	3,924	3,795	3,578	3,449	3,359
New Mexico	1,389	1,247	1,190	780	736	712	671	647	630
New York	9,425	8,298	7,917	6,328	5,973	5,777	5,447	5,250	5,114
North Carolina	5,775	5,185	4,946	3,049	2,878	2,783	2,625	2,529	2,464
North Dakota	687	617	589	422	398	385	363	350	341
Ohio	8,820	7,916	7,552	5,704	5,573	5,389	5,082	4,898	4,771
Oklahoma	3,063	2,748	2,622	1,599	1,509	1,460	1,376	1,327	1,292
Oregon	2,185	1,962	1,872	1,492	1,408	1,362	1,284	1,238	1,206
Pennsylvania	8,994	8,073	7,702	5,781	5,457	5,277	4,976	4,796	4,672
Rhode Island	697	625	596	515	486	470	443	427	416
South Carolina	3,001	2,694	2,570	1,666	1,573	1,521	1,434	1,382	1,346
South Dakota	861	772	736	533	503	487	459	442	431
Tennessee	4,090	3,671	3,502	2,490	2,351	2,273	2,143	2,066	2,012
Texas	12,747	11,442	10,916	8,213	7,753	7,497	7,070	6,814	6,637
Utah	1,149	1,031	984	842	795	769	725	699	680
Vermont	540	484	462	359	339	328	309	298	290
Virginia	3,992	3,583	3,418	2,652	2,503	2,421	2,283	2,200	2,143
Washington	3,005	2,696	2,572	2,146	2,026	1,959	1,847	1,780	1,734
West Virginia	1,818	1,632	1,557	1,061	1,002	969	913	880	857
Wisconsin	4,043	3,629	3,462	2,701	2,550	2,466	2,325	2,241	2,183
Wyoming	647	580	553	430	406	393	370	357	347
U.S. TOTAL	176,465	158,491	151,200	116,154	109,649	106,031	99,987	96,361	93,864

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(1) Data from 1977 through 1981 represent total service stations. Data beginning in 1982 represent stations with payrolls which, by Census Bureau definition, generate more than half of their sales dollars through the sale of gasoline and oil products.

Source: 1977 and 1982: U.S. Census Bureau, Retail Trade Census
Other years: National Petroleum News estimates based on Census Bureau and other Commerce Department data.

Section XV
Table 3

THE FOLLOWING EQUIVALENTS ARE DERIVED FROM THE USE OF BRITISH THERMAL UNIT HEAT VALUES(1)

		Crude Petroleum (42 gal/bbl)	Anthracite Coal (short ton)	Bituminous Coal (short ton)	Natural Gas-Dry (1000 cu ft)	Distillate Fuel Oil (42 gal/bbl)	Residual Fuel Oil (42 gal/bbl)	Liquefied Pet. Gas (42 gal/bbl)
Crude Petroleum	42 Gal.Bbl.equals	-	0.228	0.221	5.604	0.996	0.923	1.446
Anthracite Coal	Short Ton equals	4.379	-	0.969	24.541	4.361	4.040	6.333
Bituminous Coal and Lignite	Short Ton equals	4.517	1.031	-	25.314	4.498	4.167	6.532
Natural Gas-Dry	1000 Cu.Ft.equals	0.178	0.041	0.040	-	0.178	0.165	0.258
Distillate Fuel Oil	42 Gal.Bbl.equals	1.004	0.229	0.222	5.628	-	0.927	1.452
Residual Fuel Oil	42 Gal.Bbl.equals	1.084	0.248	0.240	6.074	1.079	-	1.567
Liquefied Petroleum Gas	42 Gal.Bbl.equals	0.692	0.158	0.153	3.875	0.689	0.638	-
(1) B.T.U. Heat Values as used by Bureau of Mines	1000s	5,800	25,400	26,200	1,035	5,825	6,287	4,011

Other Refined Products' B.T.U. Values (1000s): Gasoline 5,248; Kerosine 5,670; Lubricants 6,064.8; Wax 5,537.3; Asphalt 6,636; Miscellaneous 5,796; Natural Gasoline 4,620 per 42 gallon barrel.

GALLON, BARREL, POUND AND TON EQUIVALENTS FOR CONVERTING MEASURES OF CRUDE PETROLEUM AND REFINED PETROLEUM PRODUCTS

	Gravity at 60 F.(2)	Gallons Per Pound	Pounds Per Gallon	Pounds Per 42 Gal Barrel	Short Ton 2,000 Pounds	Barrels Per Metric Ton 2,204.6 Pounds	Barrels Per Long Ton 2,240 Pounds
Crude Petroleum (Foreign)	25.6	.13333	7.500	315	6.349	6.998	7.111
Crude Petroleum (Domestic)	36.0	.14217	7.034	295	6.770	7.463	7.582
Gasoline and Naphtha	59.5	.16215	6.167	259	7.721	8.511	8.648
Kerosine	43.0	.14812	6.751	284	7.053	7.775	7.900
Distillate Fuel Oil	31.3	.13817	7.237	304	6.580	7.253	7.369
Residual Fuel Oil	18.0	.12687	7.882	331	6.041	6.660	6.766
Lubricating Oil	25.6	.13333	7.500	315	6.349	6.998	7.111
Lubricating Grease	33.4	.13996	7.145	300	6.665	7.346	7.464
Wax (Refined and Unrefined)	45.0	.14982	6.675	280	7.134	7.864	7.990
Asphalt	5.6	.11634	8.596	361	5.540	6.106	6.205
Coke	-	.10479	9.543	401	4.990	5.500	5.589
Road Oil	14.5	.12390	8.071	339	5.900	6.503	6.608
Petroleum Jelly and Petrolatum	33.4	.13996	7.145	300	6.665	7.346	7.464
Liquefied Petroleum Gas	-	.22104	4.524	190	10.526	11.603	11.789
Gilsonite	5.0	.11583	8.634	363	5.515	6.080	6.177

(2) For each product the gravity listed is assumed to be representative of the average

Still Gas 3,600 Cu.Ft. = One 42 Gallon Barrel
U.S. Gallon = .833 Imperial Gallon
Imperial Gallon = 1.2 U.S. Gallons

Source: API-ASTM-IP Petroleum Measurement Tables

Section XV
Table 4

HEAT VALUES FOR VARIOUS ENERGY PRODUCTS

Energy Products	Units	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Coal											
Production	Million Btu/sh. ton	23.376	23.072	22.897	22.855	22.597	22.248	22.454	22.415	22.309	22.240
Consumption	Million Btu/sh. ton	23.057	22.677	22.506	22.498	22.265	22.017	22.100	21.947	21.714	21.675
Coal Coke	Million Btu/sh. ton	24.800	24.800	24.800	24.800	24.800	24.800	24.800	24.800	24.800	24.800
Crude Oil(1)	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Petroleum Products											
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494	5.479	5.448	5.415
Residential & Commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471	5.468	5.409	5.392
Industrial	Million Btu/barrel	5.565	5.537	5.527	5.535	5.552	5.546	5.416	5.376	5.310	5.262
Transportation	Million Btu/barrel	5.397	5.394	5.392	5.396	5.402	5.407	5.430	5.440	5.434	5.423
Electric Utilities	Million Btu/barrel	6.245	6.238	6.250	6.251	6.249	6.251	6.258	6.254	6.258	6.258
LPG average	Million Btu/barrel	3.746	3.730	3.715	3.711	3.677	3.669	3.680	3.674	3.643	3.615
Natural Gas Plant Liquids	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925	3.955	3.914	3.930	3.872
Natural Gas											
Production, dry	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028
Production, wet	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092	1,098	1,103	1,107
Consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028
Fossil Fuel Steam-Electric Power Plant Generation(2)	Btu/kilowatthour	10,389	10,442	10,406	10,373	10,435	10,361	10,353	10,388	10,453	10,423
Nuclear Power Plant Gen.	Btu/kilowatthour	10,903	11,161	11,013	11,047	10,769	10,941	10,879	10,908	11,030	11,073
Geothermal Power Plant Gen.	Btu/kilowatthour	21,674	21,674	21,611	21,611	21,611	21,611	21,545	21,639	21,639	21,629
Electricity Consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412

(1) Includes lease condensate.
(2) This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

HEAT VALUES FOR VARIOUS ENERGY PRODUCTS

Energy Product	Units	1983	1984	1985	1986-87(3)
Coal					
Production	Million Btu/sh. ton	22.056	22.014	21.874	21.918
Consumption	Million Btu/sh. ton	21.581	21,577	21.370	21.467
Coal Coke	Million Btu/sh. ton	24.800	24.800	24.800	24.800
Crude Oil(1)	Million Btu/barrel	5.800	5.800	5.800	5.800
Petroleum Products					
Consumption	Million Btu/barrel	5.406	5.395	5.387	5.415
Residential & Commercial	Million Btu/barrel	5.286	5.261	5.203	5.245
Industrial	Million Btu/barrel	5.273	5.256	5.265	5.318
Transportation	Million Btu/barrel	5.416	5.423	5.421	5.424
Electric Utilities	Million Btu/barrel	6.255	6.251	6.247	6.257
LPG average	Million Btu/barrel	3.614	3.599	3.603	3.640
Natural Gas Plant Liquids	Million Btu/barrel	3.839	3.812	3.815	3.797
Natural Gas					
Production, dry	Btu/cubic foot	1,031	1,031	1,032	1,030
Production, wet	Btu/cubic foot	1,115	1,109	1,112	1,110
Consumption	Btu/cubic foot	1,031	1,031	1,032	1,030
Fossil Fuel Steam-Electric Power Plant Generation	Btu/kilowatthour	10,445	10,211	10,339	10,320
Nuclear Power Plant Gen.	Btu/kilowatthour	10,905	10,843	10,809	10,807
Geothermal Power Plant Gen.	Btu/kilowatthour	21,290	21,303	21,263	21,263
Electricity Consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412

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(1) Includes lease condensate.
(2) This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.
(3) Preliminary data.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

U.S. PETROLEUM INDUSTRY INJURY FREQUENCY RATES BY INDUSTRY SECTOR(1)

Industry Sector	1980	1981	1982	1983	1984	1985
Exploration & Production	3.07	2.60	2.58	2.38	2.06	1.81
Gas Processing	3.67	4.33	3.82	3.81	3.77	3.95
Drilling	24.96	23.34	18.91	14.23	14.91	11.13
Petrochemical Mftg.	6.11	5.07	3.54	3.41	2.60	2.50
Refining	5.87	5.21	4.88	4.31	3.52	3.49
Marketing-Wholesale	4.38	4.19	3.39	3.60	3.21	3.80
Marketing-Retail	4.88	4.49	4.25	3.72	4.42	3.96
Pipeline-Liquid	4.21	4.11	3.95	3.95	3.72	3.73
Pipeline-Gas	6.10	4.99	4.83	5.43	4.39	3.58
Marine	3.08	2.00	2.42	2.85	2.70	2.51
Research & Development	2.08	2.19	2.07	2.24	1.72	1.53
Gen. Services, Engineering, and Miscellaneous	1.31	1.35	1.30	1.29	1.08	1.14
Combined Functions	3.76	2.59	4.79	3.50	3.25	N.A.
TOTAL	4.22	3.77	3.48	3.20	2.85	2.77

(1) Covers operations subject to OSHA recordkeeping requirements only. Frequency rates represent total recordable cases per 100 fulltime workers.

Source: American Petroleum Institute, Summary of Occupational Injuries and Illnesses In the Petroleum Industry.

Section XV
Table 6

U.S. ACREAGE UNDER LEASE FOR OIL AND GAS PRODUCTION
(As of January 1)

	1981		1982		1983	
State	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas
Alabama	8,895,085	183,035	9,183,076	183,076	9,297,939	227,040
Alaska	3,527,540	442,540	4,131,340	451,340	5,464,155	459,060
Arizona	12,005,400	5,400	20,146,200	6,200	22,018,200	7,200
Arkansas	9,132,700	1,025,200	10,140,960	1,140,960	12,086,910	1,168,700
California	4,106,000	516,000	5,055,461	455,461	6,018,559	608,646
Colorado	31,809,000	1,103,000	30,639,000	1,209,000	31,577,000	1,334,000
Florida	3,005,200	34,200	3,715,000	35,000	3,755,000	35,000
Illinois	4,413,000	663,000	4,673,000	673,000	4,468,000	668,000
Indiana	8,778,810	7,828,810	8,832,960	7,832,960	8,848,070	7,838,070
Kansas	13,222,400	3,804,000	13,794,900	3,882,000	17,000,000	7,600,000
Kentucky	4,950,000	950,000	5,225,000	975,000	5,500,000	1,000,000
Louisiana	15,962,000	4,595,000	16,100,000	7,000,000	13,550,000	6,990,000
Maryland	449,200	14,200	494,200	14,200	494,200	14,200
Michigan	12,550,000	550,000	14,074,000	574,000	14,324,000	574,000
Mississippi	7,951,400	603,400	11,926,500	626,500	11,944,100	628,500
Missouri	504,430	4,030	612,298	12,298	632,900	12,900
Montana	36,060,000	850,000	38,170,000	940,000	42,023,000	1,003,000
Nebraska	12,584,000	280,000	12,570,000	320,000	14,416,000	331,000
Nevada	17,855,800	3,800	23,554,000	4,000	31,646,600	4,600
New Mexico	30,130,000	3,330,000	30,020,000	3,720,000	31,413,000	3,655,000
New York	5,500,000	1,000,000	5,710,000	1,110,000	5,850,000	1,250,000
North Dakota	22,299,000	473,000	22,920,000	530,000	22,256,000	591,000
Ohio	16,527,377	2,861,927	16,520,326	2,979,826	16,448,304	3,076,994
Oklahoma	16,886,900	3,769,000	17,402,000	4,145,900	17,691,600	4,491,600
Oregon	4,001,120	1,120	4,001,000	1,000	9,001,500	1,500
Pennsylvania	17,010,160	2,625,160	17,137,160	2,731,500	17,540,160	2,851,770
South Dakota	7,457,500	19,500	8,120,000	21,000	7,027,000	33,000
Tennessee	6,522,160	22,160	8,327,257	27,257	8,528,500	28,500
Texas	59,974,600	10,900,000	64,350,000	11,750,000	64,723,000	12,475,000
Utah	29,519,000	345,000	30,900,000	364,000	32,014,000	400,000
Virginia	3,053,150	81,936	3,456,940	90,555	3,158,906	112,838
West Virginia	13,934,000	7,160,000	14,134,000	7,325,000	13,447,000	7,528,000
Wyoming	38,765,000	2,200,000	36,850,000	2,300,000	34,227,000	2,445,000
TOTAL U.S.(1)	479,531,532	58,144,418	522,518,628	73,060,033	538,390,603	69,444,118

(1) Totals may not add due to the addition of miscellaneous acreage for which detailed information is not available.

Source: IPAA--The Oil Producing Industry in Your State, Annuals.

Section XV
Table 6a

U.S. ACREAGE UNDER LEASE FOR OIL AND GAS PRODUCTION
(As of January 1)

State	1984		1985		1986	
	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas
Alabama	9,416,034	276,428	9,182,000	316,000	8,010,000	371,000
Alaska	10,574,539	521,983	11,240,000	665,000	12,582,000	682,000
Arizona	23,730,680	6,080	23,731,000	6,000	23,747,000	6,000
Arkansas	13,300,000	1,200,000	12,998,000	1,215,000	10,694,000	1,205,000
California	8,565,791	433,791	9,250,000	500,000	5,810,000	428,000
Colorado	35,531,520	1,447,520	35,531,000	1,509,000	35,622,000	1,556,000
Florida	5,130,080	36,280	2,637,000	37,000	2,639,000	37,000
Georgia	1,894,127	0	2,800,000	0	2,291,000	0
Idaho	870,709	0	913,000	0	600,000	0
Illinois	4,629,000	679,000	4,735,000	706,000	5,900,000	880,000
Indiana	8,963,125	7,925,600	8,963,000	7,926,000	8,000,000	6,295,000
Iowa	0	0	5,000,000	0	5,000,000	0
Kansas	18,672,133	8,517,133	19,750,000	10,595,000	16,380,000	8,795,000
Kentucky	5,525,000	1,025,000	6,350,000	1,210,000	5,458,000	1,089,000
Louisiana	13,672,466	6,997,000	14,500,000	7,842,000	14,080,000	7,609,000
Maryland	524,200	14,200	314,000	17,000	316,000	16,000
Michigan	14,576,720	608,720	14,756,000	628,000	14,931,000	653,000
Mississippi	11,478,900	629,140	10,402,000	700,000	9,500,000	710,000
Missouri	712,900	12,900	713,000	13,000	712,000	12,000
Montana	44,050,200	1,054,400	44,050,000	1,085,000	44,111,000	1,105,000
Nebraska	13,411,080	326,080	13,411,000	334,000	13,508,000	340,000
Nevada	29,852,800	4,800	29,853,000	5,000	28,876,000	5,000
New Mexico	42,524,880	3,725,280	42,621,000	3,822,000	42,688,000	3,878,000
New York	5,900,000	2,000,000	5,600,000	2,000,000	5,610,000	2,010,000
North Carolina	200,000	0	457,000	0	500,000	0
North Dakota	23,299,820	617,120	23,300,000	643,000	23,324,000	658,000
Ohio	16,443,251	3,216,051	15,209,000	3,329,000	14,886,000	3,420,000
Oklahoma	18,990,000	4,025,000	19,200,000	7,211,000	20,435,000	7,675,000
Oregon	7,001,600	1,600	5,025,000	25,000	4,460,000	60,000
Pennsylvania	17,672,160	2,940,610	17,997,000	3,047,000	18,042,000	3,200,000
South Dakota	10,877,340	1,032,640	8,120,000	36,000	8,123,000	37,000
Tennessee	9,830,000	50,715	3,827,000	12,000	3,115,000	18,000
Texas	70,300,000	14,938,000	68,374,000	16,500,000	60,670,000	14,640,000
Utah	38,229,686	487,686	38,230,000	504,000	38,258,000	518,000
Virginia	3,376,396	122,700	3,236,000	147,000	2,586,000	316,000
West Virginia	13,757,000	7,693,000	13,408,000	7,807,000	12,673,000	7,807,000
Wyoming	38,999,100	2,598,400	38,999,000	2,659,000	39,064,000	2,697,000
TOTAL U.S.(1)	592,483,237	69,018,667	587,646,000	83,051,000	566,930,000	78,728.000

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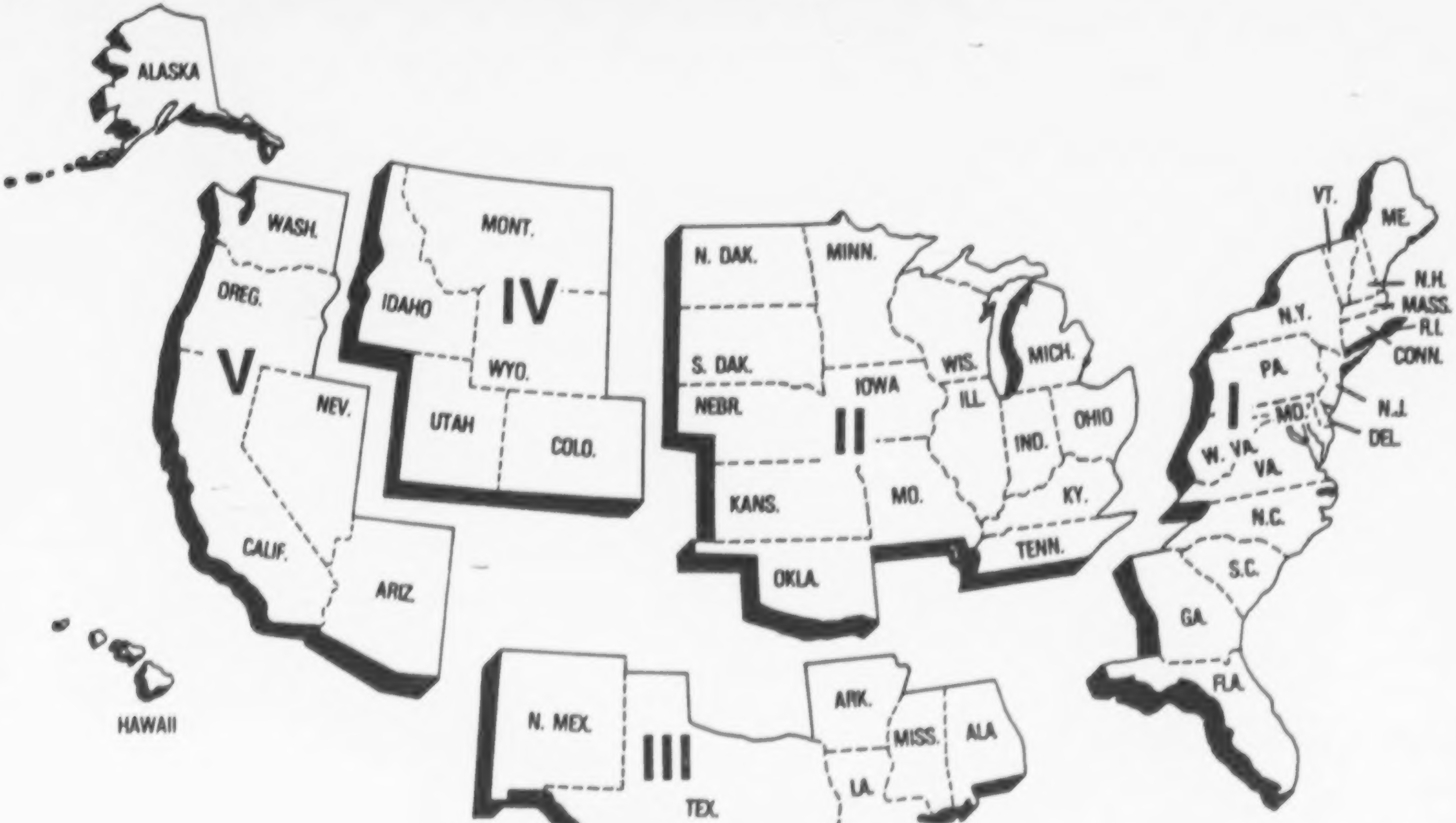
(1) Totals may not add due to the addition of miscellaneous acreage for which detailed information is not available.

Source: IPAA--The Oil Producing Industry in Your State, Annuals.

Petroleum Administration for Defense (PAD) Districts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HEATING EQUIPMENT AND FUELS FOR OCCUPIED HOUSING UNITS

(Thousands)

	1950	1960	1970	1980	1983
Total occupied units	42,826	53,024	63,445	80,390	84,638
Heating Equipment					
Warm air furnace	11,508(1)	17,378(1)	27,515(1)	39,279	44,320
Heat Pumps	(1)	(1)	(1)	2,835	2,171
Steam or Hot Water	10,071	11,990	13,211	13,859	13,772
Floor, Wall or Pipeless furnace	(1)	6,088	5,552	4,693	5,977
Built-in electric units	--	664	3,236	6,370	6,207
Room heaters with flue	15,399(2)	11,183(2)	7,209	6,098	3,438
Room Heaters without flue	5,268	5,218	3,558	2,736	2,926
Fireplaces, Stoves or Heaters (3)	(2)	(2)	2,766	3,977	5,152
None	581	503	398	541	677
House heating fuel					
Utility gas	11,387	22,851	35,014	42,658	46,700
Fuel oil, Kerosene, etc.	9,686	17,158	16,473	14,655	13,031
Electricity	283	933	4,876	14,768	15,684
Bottled, tank or LPgas	787	2,686	3,807	4,535	3,869
Wood or other fuel	4,855	2,460	1,060	2,729	4,245
Coal or Coke	14,828	6,456	1,821	504	432
None	999	478	395	541	677
Cooking Fuel					
Electricity	6,403	16,351	25,768	41,906	NA
Utility gas	22,084	27,296	31,244	32,375	NA
Bottled, tank or LPgas	3,417	6,491	5,314	5,569	NA
Other fuel	10,796	2,603	908	398	NA
None	124	280	213	142	NA

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(1) "Floor, well or pipeless furnace" and "heat pumps" included in "Warm air furnace".
(2) "Fireplace, stoves or portable heaters" included in "Room heaters with flue".
(3) Portable Heaters.

Source: U.S. Bureau of the Census, Census of Housing, 1960 and 1980; Current Housing Reports, Annual Housing Survey 1983.

SELECTED DEFINITIONS

BARREL--unit of volumetric measure. One barrel equals 42 U.S. gallons.

CRUDE OIL--technically defined as a mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

CRUDE OIL, PRODUCTION--the volume of liquids statistically defined as crude oil, which is produced from oil reservoirs during given periods of time. The amount of such production for a given period is generally established by measurement of volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

CRUDE OIL, PROVED RESERVES--Proved reserves of crude oil as of December 31 of any given year are the estimated quantities of all liquids statistically defined as crude oil, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Reservoirs are considered proved if economic producibility is supported by either actual production or conclusive formation tests. The area of an oil reservoir considered proved includes: (1) that portion delineated by drilling and defined by gas-oil or oil-water contacts, if any; and (2) the immediately adjoining portions not yet drilled but which can be reasonably judged as economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurence of hydrocarbons controls the lower proved limit of the reservoir.

Reserves of crude oil which can be produced economically through application of improved recovery techniques (such as fluid injection) are included in the "proved" classification.

Estimates of proved crude oil reserves do not include the following: (1) oil that may become available from known reservoirs but is reported separately as "indicated additional reserves"; (2) natural gas liquids (including lease condensate); (3) oil the recovery of which is subject to reasonable doubt because of uncertainty as to geology, reservoir characteristics, or economic factors; (4) oil that may occur in untested prospects; and (5) oil that may be recovered from oil shales, coal, gilsonite, and other such sources.

DEVELOPMENT WELL--In general, a well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

DISTILLATE FUEL OIL--A general classification for one or more distilled petroleum fractions used for domestic heating and industrial burners, or for power generation in compression-ignition engines. These fractions are No. 1 Fuel Oil, No. 2 Fuel Oil, Diesel Fuel and No. 4 Fuel Oil.

DRY HOLE--An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

EXPLORATORY WELL--A well drilled (1) to find and produce oil or gas in an unproved area; (2) to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir; or (3) to extend the limits of a known oil or gas reservoir.

GAS WELL--A well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil.

KEROSINE--A refined petroleum distillate conforming to the requirements of ASTM D 3699. Two classifications are No. 1-K and No.2-K.

KEROSINE-TYPE JET FUEL (Jet A)--A quality kerosine product covered by ASTM Spec. D 1655. Used primarily as fuel for commercial turbojet and turboprop aircraft engines. A relatively low freezing point distillate of the kerosine type.

LIQUEFIED REFINERY GAS (LRG)--Includes liquefied refinery gases that were fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state and represent final products. Excludes still gases used for chemical or rubber manufacture which are reported as petrochemical feedstocks and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported in the following categories for use as petrochemical feedstock, for other uses or both: ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane.

LUBRICATING OILS--Includes all grades of paraffinic and naphthenic lubricating oil stocks, from light distillate spindle oils to residual cylinder stocks. Oils used in grease-making are also classified as lubricating oils.

MOTOR GASOLINE--A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, obtained by blending appropriate refinery streams to form a fuel suitable for use in spark ignition engines. Includes all refinery products within the gasoline range (ASTM Spec. D 439) that are to be marketed as motor gasoline without further processing, i.e., any refinery operation except mechanical blending. Includes both leaded and unleaded grades. Also includes finished components in the gasoline range which will be used for blending or compounding into finished gasoline

SELECTED DEFINITIONS

NAPHTHA-TYPE JET FUEL--(Jet B) A fuel in the heavy naphtha boiling range covered by ASTM Spec. D 1655 and meeting military Spec. MIL-T-5624 (JP-4). Used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ramjet and petroleum rocket fuels.

NATURAL GAS--A mixture of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs at reservoir conditions. Natural gas may be subclassified as follows: Associated Gas, Dissolved Gas, and Non-associated Gas.

NATURAL GAS, PRODUCTION--Statistics pertaining to natural gas production represent volumes of gas produced from natural oil and gas reservoirs during given periods of time with adjustments (where applicable) to reflect (1) the volume of gas returned to natural reservoirs, and (2) the reduction of volume resulting from the removal of natural gas liquids and nonhydrocarbon gases. The volume of natural gas withdrawn from underground storage facilities is not included in natural gas production statistics.

NATURAL GAS, PROVED RESERVES--Proved reserves of natural gas as of December 31 of any given year are the estimated quantities of natural gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in the future from known natural oil and gas reservoirs under existing economic and operating conditions.

Reservoirs are considered proved if economic producibility is supported by either actual production or conclusive formation tests. The area of a reservoir considered proved includes: (1) that portion delineated by drilling and defined by gas-oil, gas-water or oil-water contacts; and (2) the adjoining portions not yet drilled but which can be reasonably judged economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurrence of hydrocarbons controls the lower proved limit of the reservoir.

Reserve estimates are prepared for total recoverable natural gas, nonassociated gas, and associated-dissolved gas. Estimates do not include (1) gaseous equivalents of natural gas liquids expected to be recovered from reservoir natural gas as it is produced; (2) natural gas being held in underground storage; or (3) nonhydrocarbon gases.

NATURAL GAS LIQUIDS--Those portions of reservoir gas which are liquefied at the surface in lease separators, field facilities, or gas processing plants. Natural gas liquids include but are not limited to: ethane, propane, butanes, pentanes, natural gasoline, and condensate.

NEW-FIELD WILDCAT--A well located on a structural feature or other type of trap which has not previously produced oil or gas.

OFFSHORE--Term defined as that geographic area which lies seaward of the coastline. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking seaward limit of inland water.

OFFSHORE WELL--A well which is bottomed at, or produces from, a point which lies seaward of the coastline. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking the seaward limit of inland water. If a state agency uses a different basis for classifying onshore and offshore wells, the state classification is used.

OIL WELL--A well completed for the production of crude oil from at least one oil zone or reservoir.

PAD DISTRICTS (Petroleum Administration for Defense Districts)--a geographic aggregation of the 50 states and the District of Columbia into five districts, originally designed by the Petroleum Administration for Defense in 1950 for purposes of administration. These are an outgrowth of the World War II Petroleum Administration for War Districts.

PETROLEUM PRODUCTS--A generic term used to describe products obtained from distilling and processing crude oil, unfinished oils, natural gas liquids, blend stocks and other miscellaneous hydrocarbon compounds.

PETROLEUM REFINERY--A complex installation of equipment designed to manufacture finished petroleum products from crude oil and other liquid hydrocarbons.

PRIMARY STOCKS OF PETROLEUM--Represents stocks held at refineries, natural gas processing plants, bulk terminals, pipelines and leases. Primary stocks exclude those held in secondary and tertiary (consumer) storage.

PROCESSING GAIN--The volumetric amount by which total refinery output is greater than input. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed. Therefore, in terms of volume (barrels), the total output of products is greater than input.

PROCESSING LOSS--The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed and thus an output, in barrels, smaller than the input.

PRODUCT SUPPLIED FOR DOMESTIC USE--Approximately represents consumption of petroleum products in that it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending operations, pipelines, and bulk terminals. It includes losses and fuels used in the industry.

RESIDUAL FUEL OIL--General classification for fuels obtained as liquid still bottoms from the distillation of crude, used alone or in blends with heavy liquids from other refinery process operations. Includes Grades No. 5 (light and heavy), No. 6 (including heady-grade, so-called Bunker C oil), and Navy Special fuel oil.

SERVICE WELL--A well drilled or completed for the purpose of supporting production in an existing field.

SELECTED DEFINITIONS

STRATEGIC PETROLEUM RESERVE (SPR)--Petroleum inventories (currently only crude oil) held in Government-owned underground storage for use during periods of supply interruptions.

STRATIGRAPHIC TEST--A drilling effort, geologically directed, to obtain information pertaining to a specific geological condition that might lead toward the discovery of an accumulation of hydrocarbons. Such wells are customarily drilled without the intention of being completed for hydrocarbon production. This classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration.

UNFINISHED OILS--Includes all oils requiring further processing, i.e., any refinery operation except mechanical blending.

WELL--A hole drilled in the earth for the purpose of (1) finding or producing crude oil or natural gas; or (2) providing services related to the production of crude oil or natural gas.

CURRENT SOURCE LISTINGS FOR BASIC PETROLEUM DATA BOOK

Section I

U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

U.S. Department of Commerce, Bureau of the Census, Current Population Reports (202)763-5002.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section II

U.S. Department of Energy, Energy Information Administration, Crude Oil, Natural Gas and Natural Gas Liquids Reserves (202)586-6090.

Oil and Gas Journal, "Worldwide Report" issue (918)835-3161.

U.S. Department of Interior, U.S. Geological Survey, Circular 860 (703)860-7549.

Section III

American Petroleum Institute, Quarterly Completion Reports (202)682-8518

Society of Exploration Geophysicists, Geophysical Activity Annual Report (918)493-3516.

American Association of Petroleum Geologists, North American Drilling Activity (918)584-2555.

American Petroleum Institute, Joint Associationn Survey (202)682-8491.

Oil and Gas Journal (918)835-3161.

Hughes Tool Company (713)924-2413.

Reed Tool Company, Annual Rotary Rig Census (713)924-5200.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

World Oil Magazine (713)529-4301.

Interstate Oil Compact Commission and National Stripper Well Association (405)525-3556.

Section IV

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

National Stripper Well Association and Interstate Oil Compact Commission (405)525-3556.

Section V

U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings" (202)523-1821.

The Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies" (212)552-2222.

The Chase Manhattan Bank, "Capital Investments of the World Petroleum Industry" (212)552-2222.

American Petroleum Institute, Survey of Oil and Gas Expenditures (202)682-8491.

American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry (202)682-8470.

American Petroleum Institute, Financial Trends of Leading U.S. Oil Companies (202)682-8551.

U.S. Department of Treasury, Internal Revenue Service, SOI Bulletin (202)376-0102.

U.S. Department of Commerce, Bureau of the Census, FT 135 and FT 410 (202)763-5140.

Section VI

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

U.S. Department of Labor, Bureau of Labor Statistics, Producer Price Indexes (202)272-5123.

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Prices: Energy and Food (202)272-5177.

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index (unadjusted) (202)272-5160.

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annual (202)586-6077.

U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly (202)586-5214.

Petroleum Intelligence Weekly (212)575-1242.

Section VII

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section VII (continued)
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthlies (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly (202)586-5214.

U.S. Department of Transportation, Federal Highway Administration, "Monthly Motor Fuel Reported by States" (202)426-0170.

Section VIII
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Oil and Gas Journal, "Worldwide Report" issue (918)835-3161.

British Petroleum, BP Statistical Review of World Energy. (212)887-9300.

U.S. Department of Energy, Energy Information Administration, International Energy Annual (202)586-9412.

Section IX
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section X
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (202) 887-9300.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

Section XI
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

U.S. Department of Interior, U.S. Geological Survey, Minerals Management Service (202)343-3421.

Offshore Magazine (713)621-9720.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

Section XII
American Gas Association, Gas Facts (703)841-8400.

Association of Oil Pipelines (202)331-8228.

U.S. Department of Transportation, Coast Guard, "Polluting Incidents In and Around U.S. Waters" (202)267-2229.

U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics" (202)426-0160.

Automotive News, "Market Data Book" issues (313)446-6000.

Section XIII
U.S. Department of Energy, Energy Information Administration, Crude Oil, Natural Gas and Natural Gas Liquids Reserves (202)586-6090.

Oil and Gas Journal "Worldwide Report" issues (918)835-3161.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

U.S. Department of Energy, Energy Information Administration, Natural Gas Monthly (202)586-6077.

Section XIV
Oil and Gas Journal, "Worldwide Report" issues (918)835-3161.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Organization of Petroleum Exporting Countries, OPEC Annual Statistical Bulletin, Obere Donaustrasse 93, A-1020 Vienna, Austria.

Section XV
Independent Petroleum Association of America, The Oil Producing Industry in Your State (202)857-4722.

National Petroleum News, Factbook issue (201)682-2902.

ASTM-IP Petroleum Measurement Tables, API (202)682-8145.

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

American Petroleum Institute, Summary of Occupational Injuries and Illnesses in the Petroleum Industry (202)682-8506.

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The American Petroleum Institute, incorporated in 1919 under the laws of the District of Columbia, serves as a forum, information bureau, technical clearing house, and national trade association for the petroleum industry.

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A MESSAGE FOR THE DATA BOOK USER

This is a secondary source publication. The American Petroleum Institute has undertaken the task of compiling these data in this publication as a service to interested users. Except for those tables where API is the primary source, no endorsement of data accuracy or completeness is intended or implied by the data's inclusion in this publication.

Preliminary data are included in this compendium in order to provide the most timely information possible. These data are identified as preliminary. Annual revised figures are published as they become available. If any of these data are revised again in subsequent years, they are not included in this report unless they represent a major revision of the series.

For some data series, there are several agencies publishing similar information. Consequently, the data may not match perfectly. The analyst is cautioned that it is his responsibility to determine which series best meets his requirements.

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Section I
Table 1

ANNUAL SUPPLY/DISPOSITION SUMMARY OF TOTAL ENERGY IN THE U.S.**
(Quadrillion BTU)

SUPPLY/DISPOSITION	1985	1986	1987	1988	1989	1990	1995	2000
Production								
Crude Oil and Lease Condensate	19.0	18.4	17.6	17.3	16.9	16.1	13.8	12.8
NGPL's	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3
Natural Gas(1)	16.9	16.5	16.6	16.6	16.9	16.8	17.3	17.9
Coal	19.3	19.5	20.1	20.0	20.4	21.1	23.4	25.2
Nuclear	4.1	4.5	4.9	5.3	5.5	5.9	6.3	6.4
Hydropower/Other(2)	3.2	3.3	2.9	3.1	3.3	3.3	3.4	3.4
Total Production	64.8	64.2	64.3	64.5	65.2	65.4	66.5	68.0
Imports								
Crude Oil(3)	6.8	8.8	9.9	10.1	11.8	12.8	16.0	17.9
Petroleum Prod.	4.0	4.3	4.0	4.2	4.2	4.2	4.6	4.9
Natural Gas(4)	0.9	0.7	0.9	0.9	1.1	1.2	1.8	2.6
Other Imports(5)	0.5	0.4	0.5	0.4	0.5	0.6	0.6	0.8
Total Imports	12.1	14.3	15.3	15.7	17.6	18.8	23.1	26.2
Exports								
Coal	2.4	2.2	2.0	1.9	2.0	2.1	2.4	2.4
Petroleum	1.7	1.7	1.6	1.5	1.6	1.6	1.6	1.6
Total Exports	4.1	3.9	3.6	3.5	3.6	3.7	4.0	4.0
Adjustments(6)	1.2	-0.3	0.3	0.5	-0.5	-0.6	-0.6	-0.6
Consumption								
Petroleum Products(7)	30.9	32.2	32.6	33.0	33.4	33.7	35.1	36.3
Natural Gas	17.9	16.7	17.4	17.4	17.8	17.8	18.9	20.2
Coal	17.5	17.3	18.0	18.0	18.3	18.8	20.8	22.6
Nuclear	4.1	4.5	4.9	5.3	5.5	5.9	6.3	6.4
Hydroelectric/Other(8)	3.6	3.6	3.3	3.5	3.7	3.8	3.9	4.1
Total Consumption	74.0	74.2	76.2	77.2	78.8	79.9	85.0	89.6

** Base Case Forecast: Economy is assumed to maintain an average growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

(1) Dry natural gas.
(2) Includes hydropower, geothermal power, and wood waste.
(3) Includes imports of crude oil for the Strategic Petroleum Reserve.
(4) Represents net imports.
(5) Includes electricity, coal and coal coke imports.
(6) Balancing item that includes stock changes, gains, losses, and unaccounted for supply.
(7) Includes natural gas plant liquids and crude oil consumed as a fuel.
(8) Includes industrial generation of hydroelectric power, net electricity imports, and electricity produced from geothermal, wood, waste, wind, photovoltaic, solar thermal sources connected to electric utility distribution systems. Also includes net coal coke imports.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

U.S. CONSUMPTION OF ENERGY BY SOURCE AND END-USE SECTOR**
(Quadrillion BTU)

SECTOR AND FUEL	1985	1986	1987	1988	1989	1990	1995	2000
Residential	8.88	8.82	9.09	9.28	9.34	9.42	9.63	9.67
Distillate and LPG(1)	1.53	1.52	1.51	1.59	1.56	1.54	1.44	1.34
Natural Gas	4.57	4.44	4.56	4.59	4.62	4.64	4.61	4.49
Other residential(2)	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.05
Electricity	2.70	2.79	2.95	3.03	3.10	3.17	3.52	3.78
Commercial	6.01	6.01	6.10	6.14	6.26	6.39	6.93	7.30
Petroleum	0.96	0.99	0.93	0.99	1.00	1.03	1.05	1.01
Natural Gas	2.51	2.39	2.40	2.38	2.42	2.46	2.60	2.68
Other Commerical(3)	0.18	0.18	0.19	0.18	0.18	0.18	0.18	0.18
Electricity	2.36	2.46	2.58	2.59	2.66	2.73	3.10	3.43
Industrial	20.40	20.01	20.58	20.88	21.49	21.91	23.23	24.16
Petroleum and LPG	4.60	4.73	4.79	4.84	4.97	5.09	5.49	5.80
Natural Gas	7.11	6.69	6.90	7.14	7.39	7.54	7.82	7.67
Coal	2.76	2.65	2.63	2.61	2.66	2.70	2.75	2.83
Other Industrial(4)	3.09	3.16	3.37	3.38	3.49	3.53	3.61	3.59
Hydropower	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Purchased Electricity	2.81	2.76	2.85	2.88	2.95	3.03	3.53	4.25
Transportation	20.09	20.76	21.25	21.49	21.59	21.68	21.94	22.30
Petroleum	19.30	19.98	20.45	20.68	20.67	20.84	21.05	21.34
Natural Gas	0.52	0.50	0.51	0.52	0.53	0.53	0.56	0.61
Other transportation(5)	0.27	0.27	0.29	0.29	0.30	0.31	0.33	0.36
Electric Utilities	26.52	26.67	27.56	27.90	28.79	29.49	33.41	37.61
Petroleum	1.10	1.45	1.23	1.18	1.30	1.26	2.06	2.77
Natural Gas	3.16	2.69	2.99	2.80	2.80	2.62	3.26	4.79
Coal	14.58	14.44	15.15	15.18	15.46	15.95	17.91	19.57
Nuclear	4.15	4.48	4.89	5.28	5.52	5.87	6.27	6.41
Hydropower/other(6)	3.54	3.61	3.30	3.46	3.72	3.78	3.91	4.07

** Base Case Forecast: Economy is assumed to maintain an everage growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

(1) Includes kerosene.

(2) Includes coal.

(3) Includes kerosene, and liquefied petroleum gas.

(4) Includes still gas, net coke imports, asphalt, special naphthas, lubricants, waxes, and petroleum coke.

(5) Includes liquefied petroleum gas, lubricants and waxes, and electricity.

(6) Includes renewable facilities such as hydropower, geothermal power, wood, waste, solar power and wind power. Also includes net electricity imports and minor petroleum products.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

SELECTED UNITED STATES ECONOMIC, DEMOGRAPHIC, AND ENERGY INDICATORS

Year	Gross National Product (Billion $ 1972)	Population (Millions)	Gross Energy Input(1) (Quadrillion Btu)	Gross Energy Per Dollar of 1972 GNP (Thousand Btu)	Gross Energy per capita (Million Btu)
1947	470.3	144.1	33.0	70.2	229.0
1948	489.8	146.6	33.9	69.2	231.2
1949	492.2	149.2	31.5	64.0	211.1
1950	534.8	152.3	34.0	63.6	223.2
1951	579.4	154.9	36.8	63.5	237.6
1952	600.8	157.6	36.5	60.8	231.7
1953	623.6	160.2	37.6	60.3	234.7
1954	616.1	163.0	36.3	58.9	222.7
1955	667.5	165.9	39.7	60.4	239.3
1956	671.6	168.9	41.7	62,1	246.9
1957	683.8	172.0	41.7	61.0	242.2
1958	680.9	174.9	41.7	61.2	238.4
1959	721.7	177.8	43.1	59.7	242.4
1960	737.1	180.7	44.6	60.5	246.8
1961	756.6	183.8	45.3	59.9	246.5
1962	800.3	186.5	47.4	59.2	254.1
1963	832.5	189.2	49.3	59.2	260.5
1964	876.4	191.8	51.2	58.4	266.9
1965	929.3	194.3	53.3	57.4	274.3
1966	984.8	196.6	56.4	57.3	286.9
1967	1,011.4	198.7	58.3	57.6	293.4
1968	1,058,1	200.7	61.7	58.3	307.4
1969	1,087.6	202.7	65.0	59.8	320.7
1970	1,085.6	205.1	67.1	61.8	327.2
1971	1,122.4	207.7	68.3	60.9	328.8
1972	1,185.9	209.9	71.6	60.4	341.1
1973	1,254.0	212.0	74.6	59.5	351.9
1974	1,246.0	213.9	72.7	58.3	339.9
1975	1,232.0	216.0	70.5	57.2	326.4
1976	1,298.0	218.4	74.3	57.2	340.2
1977	1,370.0	220.2	76.2	55.6	346.1
1978	1,439.0	222.6	78.0	54.2	350.4
1979	1,479.0	225.6	78.8	53.3	349.3
1980	1,475.0	227.7	75.9	51.5	333.3
1981	1,514.0	229.3	73.9	48.8	322.3
1982	1,485.0	231.5	70.8	47.7	305.8
1983	1,535.0	234.0	70.5	45.9	301.3
1984	1,639.0	236.2	74.0	45.2	313.3

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(1) Gross energy is the total of inputs into the economy of the primary fuels (petroleum, natural gas, and coal), including imports of their derivatives plus the generation of hydro and nuclear power converted to equivalent energy inputs.

Source: U.S. Bureau of Mines, Press Release, March 14, 1977
U.S. Department of Commerce: U.S. Bureau of Census, Current Population Reports
U.S. Energy Information Administration, Monthly Energy Review

SELECTED UNITED STATES ECONOMIC, DEMOGRAPHIC, AND ENERGY INDICATORS

Year	Gross National Product (Billion 1982 $)	Population (Millions)	Gross Energy Input(1) (Quadrillion Btu)	Gross Energy Per Dollar of 1982 GNP (Thousand Btu)	Gross Energy Per Capita (Million Btu)
1985	3,608.0	238.7	73.9	20.5	309.6
1986	3,713.0	241.1	74.3	20.0	308.2
1987	3,821.0	246.3	76.0	19.9	308.6

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(1) Gross energy is the total of inputs into the economy of the primary fuels (petroleum, natural gas, and coal), including imports of their derivatives plus the generation of hydro and nuclear power converted to equivalent energy inputs.

Source: U.S. Department of Commerce, U.S. Bureau of the Census--Current Population Reports
U.S. Department of Energy, Energy Information Administration--Monthly Energy Review

Section I
Table 4

U.S. PETROLEUM SUPPLY/DISPOSITION BALANCE**
(Millions of Barrels Per Day)

SUPPLY/DISPOSITION	1985	1986	1987	1988	1989	1990	1995	2000
World Oil Price(1)	28.52	14.40	18.11	16.80	17.61	17.81	22.40	30.76
Production	11.19	10.90	10.60	10.48	10.26	9.88	8.81	8.35
Crude and Condensate	8.97	8.68	8.31	8.18	8.00	7.63	6.54	6.03
Alaska	1.83	1.87	1.96	2.07	2.05	1.87	1.36	0.89
Lower 48	7.15	6.81	6.34	6.11	5.95	5.76	5.18	5.14
Natural Gas Plant Liquids	1.61	1.55	1.60	1.60	1.58	1.57	1.62	1.67
Other domestic	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Processing gain(2)	0.56	0.62	0.63	0.64	0.63	0.62	0.60	0.59
Imports (incl. SPR)	5.07	6.22	6.55	6.77	7.56	8.03	9.73	10.76
Crude	3.20	4.18	4.66	4.76	5.57	6.03	7.56	8.45
Refined products	1.87	2.05	1.89	2.01	1.99	2.01	2.18	2.30
Exports	0.78	0.78	0.75	0.72	0.75	0.75	0.75	0.75
Crude	0.20	0.15	0.14	0.17	0.19	0.19	0.19	0.19
Refined Products	0.58	0.63	0.61	0.55	0.56	0.56	0.56	0.56
Net Imports(incl SPR)	4.29	5.44	5.81	6.04	6.81	7.28	8.98	10.01
Primary Stock Changes								
Net withdrawals	0.22	-0.15	-0.09	0.07	-0.07	-0.02	0.01	0.03
SPR additions(-)	-0.12	-0.05	-0.06	-0.04	-0.05	-0.08	-0.08	0.00
Total Primary Supply	15.58	16.14	16.31	16.55	16.95	17.07	17.73	18.31
Refined Petroleum Products	15.73	16.28	16.52	16.66	16.96	17.06	17.72	18.30
Motor Gasoline	6.83	7.03	7.16	7.24	7.16	7.13	6.91	6.82
Jet fuel(3)	1.22	1.31	1.36	1.41	1.45	1.47	1.51	1.55
Distillate Fuel Oil(4)	2.98	3.01	3.08	3.14	3.18	3.25	3.51	3.71
Residual Fuel Oil	1.20	1.42	1.25	1.21	1.31	1.32	1.70	1.95
Other Products(5)	3.49	3.51	3.67	3.65	3.84	3.90	4.09	4.26

** Base Case Forecast: Economy is assumed to maintain an average growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

(1) The cost of imported crude oil to U.S. refiners.

(2) Represents volumetric gain in refinery distillation and cracking processes.

(3) Includes naphtha and kerosene type.

(4) Includes kerosene.

(5) Includes aviation gasoline, liquefied petroleum gas, petrochemical feedstocks, miscellaneous petroleum products, lubricants, waxes, plant condensate, natural gasoline, asphalt, road oil, still gas, special naphthas, petroleum coke, and unfinished oils.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

U.S. PRICE OF ENERGY BY SOURCE AND END-USE SECTOR**
(1987 Dollars per Million BTU)

SECTOR AND FUEL	1985	1986	1987	1988	1989	1990	1995	2000
Residential	12.07	11.30	11.41	11.26	11.43	11.48	12.29	13.71
Primary Energy	6.80	6.13	6.08	6.06	6.22	6.29	7.10	8.36
Petroleum Products	8.53	7.16	8.18	7.83	8.30	8.43	9.69	11.68
Natural Gas	8.18	5.82	5.44	5.50	5.56	5.63	6.35	7.43
Steam Coal	3.22	2.90	2.72	2.75	2.80	2.86	3.13	3.41
Electricity	24.13	22.36	22.49	21.99	21.95	21.71	21.28	22.04
Commercial	12.56	11.59	11.76	11.50	11.62	11.58	12.05	13.32
Primary Energy	5.75	4.75	4.66	4.63	4.77	4.81	5.45	6.53
Petroleum Products	6.45	4.29	5.10	4.86	5.17	5.25	6.36	8.24
Natural Gas	5.63	5.10	4.61	4.67	4.73	4.74	5.21	6.02
Steam Coal	1.83	1.67	1.56	1.58	1.61	1.64	1.80	1.96
Electricity	23.13	21.52	21.45	20.92	20.89	20.63	20.21	20.97
Industrial	6.41	4.74	4.89	4.71	4.80	4.83	5.51	6.84
Primary Energy	4.88	3.20	3.35	3.23	3.36	3.41	4.12	5.32
Petroleum Products	6.62	3.68	4.53	4.21	4.43	4.48	5.33	6.94
Natural Gas	4.08	3.14	2.57	2.63	2.69	2.75	3.46	4.52
Metallurgical Coal	2.14	1.95	1.81	1.83	1.86	1.87	2.02	2.15
Steam Coal	1.79	1.66	1.58	1.62	1.62	1.65	1.80	1.95
Electricity	15.98	14.79	14.44	13.94	13.90	13.67	13.26	13.97
Transportation	8.66	6.27	6.95	6.76	6.94	7.02	8.10	9.89
Primary Energy	8.65	6.26	6.95	6.76	6.93	7.01	8.09	9.88
Petroleum Products	8.65	6.26	6.95	6.76	6.93	7.01	8.09	9.88
Electricity	20.75	20.04	19.32	18.28	18.54	18.03	17.51	18.64
Electric Utilities								
Fossil Fuel Average	2.22	1.80	1.71	1.70	1.75	1.77	2.11	2.67
Petroleum Products	4.59	2.55	3.10	2.80	3.01	3.02	3.72	5.00
Natural Gas	3.62	2.42	2.22	2.29	2.36	2.45	3.30	4.54
Steam Coal	1.74	1.63	1.52	1.51	1.54	1.56	1.71	1.89
Average Price to All Users								
Petroleum Products	7.92	5.44	6.20	5.97	6.15	6.22	7.13	8.77
Natural Gas	4.80	4.04	3.57	3.64	3.69	5.86	4.41	5.39
Coal	1.78	1.66	1.53	1.54	1.57	1.59	1.74	1.91
Electricity	20.91	19.38	19.43	18.94	18.89	18.65	18.16	18.73

** Base Case Forecast: Economy is assumed to maintain an average growth of 2.2 percent through 2000 and real world oil prices, expressed in 1987 dollars, remain below $20 until 1994; thereafter, increasing world oil demand begins to absorb the current excess of world supply, and oil prices rise at a faster rate, reaching $31 by the year 2000. Data for 1985 and 1986 are actual.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1987.

UNITED STATES TOTAL GROSS CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES(1)
(Trillion Btu)

Year	Coal(2)	Petroleum(3)	Natural Gas Dry	Hydro-power(4)	Nuclear Power(4)	Total Consumption
1947	15,824	11,367	4,518	1,326	-	33,035
1948	14,897	12,557	5,033	1,393	-	33,880
1949	12,631	12,119	5,289	1,449	-	31,488
1950	12,913	13,489	6,150	1,440	-	33,992
1951	13,225	14,848	7,248	1,454	-	36,775
1952	11,868	15,334	7,760	1,496	-	36,458
1953	11,893	16,098	8,156	1,439	-	37,586
1954	10,195	16,132	8,548	1,388	-	36,263
1955	11,540	17,524	9,232	1,407	-	39,703
1956	11,752	18,627	9,834	1,487	-	41,700
1957	11,168	18,570	10,416	1,551	1	41,706
1958	9,849	19,214	10,995	1,636	2	41,696
1959	9,810	19,747	11,990	1,591	2	43,140
1960	10,140	20,067	12,699	1,657	6	44,569
1961	9,906	20,487	13,228	1,680	18	45,319
1962	10,189	21,267	14,121	1,821	24	47,422
1963	10,714	21,950	14,843	1,767	34	49,308
1964	11,264	22,386	15,648	1,907	35	51,240
1965	11,908	23,242	16,097	2,058	38	53,343
1966	12,495	24,395	17,392	2,073	57	56,412
1967	12,256	25,335	18,250	2,344	80	58,265
1968	12,659	27,052	19,580	2,342	130	61,763
1969	12,733	28,421	21,020	2,659	146	64,979

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives) and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, processing, and transportation of energy power.

(2) Includes anthracite, bituminous, lignite coal, and imported coke.

(3) Petroleum products including still gas, liquefied refinery gas, and natural gas liquids.

(4) Output of hydropower (adjusted for net imports or net exports) and nuclear power converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree and J.A. West: "United States Energy Through The Year 2000," December 1972

Section I
Table 6a

UNITED STATES TOTAL GROSS CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES(1)
(Trillion Btu)

Year	Coal(2)	Petroleum(3)	Natural Gas Dry	Hydro-power(4)	Nuclear Power(4)	Total Consumption
1970	12,698	29,537	22,029	2,650	229	67,143
1971	12,043	30,570	22,469	2,862	404	68,348
1972	12,461	32,966	22,699	2,929	577	71,643
1973	12,971	34,840	22,512	3,010	910	74,282
1974	12,663	33,455	21,732	3,309	1,272	72,543
1975	12,663	32,731	19,948	3,219	1,900	70,545
1976	13,584	35,175	20,345	3,065	2,111	74,362
1977	13,922	37,122	19,931	2,515	2,702	76,289
1978	13,765	37,965	20,000	3,142	3,024	78,089
1979	15,039	37,123	20,666	3,141	2,776	78,897
1980	15,423	34,202	20,394	3,118	2,739	75,955
1981	15,907	31,931	19,928	3,105	3,008	73,990
1982	15,322	30,231	18,505	3,561	3,131	70,837
1983	15,894	30,054	17,357	3,871	3,203	70,497
1984	17,070	31,051	18,507	3,717	3,553	74,060
1985	17,478	30,922	17,834	3,363	4,147	73,944
1986	17,262	32,196	16,708	3,405	4,475	74,260
1987	18,020	32,627	17,180	3,041	4,920	76,042

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives) and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, processing, and transportation of energy power.

(2) Includes anthracite, bituminous, lignite coal, and imported coke.

(3) Petroleum products including still gas, liquefied refinery gas, and natural gas liquids.

(4) Output of hydropower (adjusted for net imports or net exports) and nuclear power converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission.

(5) Figures do not total due to omission of geothermal power and electricity produced from wood and waste.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines: Press Release, February 1977
U.S. Department of Energy: 1973-1987: Energy Information Administration, Monthly Energy Review

Section I
Table 7

UNITED STATES TOTAL PRODUCTION OF ENERGY RESOURCES BY MAJOR SOURCE
(Trillion Btu)

Year	Coal(1)	Petroleum	Natural Gas	Hydropower	Nuclear Power	Total Domestic Gross Energy Inputs
1947	17,975	10,771	5,012	1,296	--	35,054
1948	17,158	11,717	5,615	1,369	--	35,859
1949	12,557	10,683	5,911	1,425	--	30,576
1950	14,647	11,449	6,841	1,415	--	34,352
1951	15,066	13,037	8,106	1,424	--	37,633
1952	13,262	13,282	8,705	1,466	--	36,715
1953	12,767	13,671	9,116	1,413	--	36,967
1954	11,001	13,427	9,488	1,360	--	35,276
1955	12,745	14,445	10,532	1,360	--	39,082
1956	13,747	15,344	11,252	1,435	--	41,778
1957	13,444	15,346	11,885	1,422	1	42,098
1958	11,201	14,154	12,244	1,592	2	39,193
1959	11,105	14,662(3)	13,361(3)	1,551(3)	2	40,681
1960	11,140	14,664(4)	14,135(4)	1,608(4)	6	41,553
1961	10,751	15,185	14,691	1,656	18	42,301
1962	11,211	15,495	15,365	1,816	24	43,911
1963	12,176	15,741	16,271	1,768	34	45,990
1964	12,854	15,691	17,138	1,886	35	47,604
1965	13,395	15,930	17,652	2,059	38	49,074
1966	13,836	16,925	18,984	2,062	57	51,864
1967	14,215	18,100	20,087	2,347	80	54,829
1968	13,955	18,593	21,548	2,349	130	56,575
1969	14,223	18,886	22,838	2,648	146	58,741
1970	15,067	20,401	24,154	2,630	229	62,481
1971	13,607	20,033	24,805	2,825	404	61,674
1972	14,500	20,041	24,792	2,866	576	62,775
1973	13,993	19,493	24,756	2,861	910	62,059
1974	14,074	18,575	23,681	3,177	1,272	60,836

(1) Includes anthracite, bituminous and lignite coals.
(3) Includes Alaska.
(4) Denotes first year for which figures include Alaska and Hawaii.

Source: U.S. Department of Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through The Year 2000," December 1972
1970-1972: U.S. Bureau of Mines, Press Release
1973-1974: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

Section I
Table 7a

UNITED STATES TOTAL PRODUCTION OF ENERGY RESOURCES BY MAJOR SOURCE
(Trillion Btu)

Year	Coal(1)	Petroleum	Natural Gas(2)	Hydropower	Nuclear Power	Total Domestic Gross Energy Inputs(3)
1975	14,990	17,729	22,014	3,155	1,900	59,860
1976	15,654	17,262	21,807	2,976	2,111	59,891
1977	15,755	17,454	21,892	2,333	2,702	60,218
1978	14,910	18,434	21,730	2,937	3,024	61,103
1979	17,539	18,104	22,362	2,931	2,776	63,801
1980	18,597	18,249	22,162	2,900	2,739	64,761
1981	18,376	18,146	22,006	2,758	3,008	64,421
1982	18,639	18,309	20,446	3,256	3,131	63,889
1983	17,246	18,392	18,714	3,502	3,203	61,190
1984	19,719	18,848	20,205	3,312	3,553	65,810
1985	19,325	18,992	19,147	2,939	4,147	64,764
1986	19,510	18,376	18,620	3,034	4,475	64,246
1987	20,121	17,593	19,050	2,609	4,920	64,539

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(1) Includes anthracite, bituminous and lignite coals.
(2) Includes natural gas plant liquids
(3) Figures do not total due to omission of geothermal power and electricity produced from wood and waste.

Source: U.S. Department of Energy, Energy Information Administration: Monthly Energy Review

Section I
Table 8

TOTAL U.S. GROSS CONSUMPTION BY CONSUMING SECTOR(1)
(Trillion Btu)

Year	Household and Commercial	Industrial	Transportation	Electricity Generation	Miscellaneous and Un-Accounted for	Total Consumption(2)
1947	6,775	12,795	8,791	4,264	410	33,035
1948	7,039	12,322	8,781	4,725	1,014	33,880
1949	6,884	11,369	8,075	4,616	544	31,488
1950	7,593	12,325	8,616	4,981	477	33,992
1951	7,857	13,698	9,206	5,281	733	36,775
1952	7,979	13,098	9,168	5,518	695	36,458
1953	7,757	13,752	9,205	5,891	981	37,586
1954	7,968	12,515	9,113	5,940	727	36,263
1955	8,595	13,991	9,826	6,595	696	39,703
1956	8,963	14,588	10,132	7,082	935	41,700
1957	8,685	14,503	10,229	7,330	959	41,706
1958	9,467	13,507	10,275	7,317	1,130	41,696
1959	9,711	14,040	10,387	7,873	1,129	43,140
1960	10,174	14,642	10,818	8,263	672	44,569
1961	10,373	14,631	10,986	8,537	792	45,319
1962	10,948	15,249	11,415	9,093	717	47,422
1963	11,016	15,908	11,962	9,683	739	49,308
1964	11,143	16,698	12,261	10,375	763	51,240
1965	11,830	17,176	12,714	11,075	548	53,343
1966	12,388	18,028	13,345	12,054	597	56,412
1967	13,015	18,230	14,015	12,728	278	58,265
1968	13,109	19,363	15,156	13,892	243	61,763
1969	13,606	20,107	15,784	15,254	228	64,979
1970	13,988	20,225	16,473	16,242	215	67,143
1971	14,549	19,299	17,076	17,222	205	68,348
1972	14,917	19,835	18,081	18,543	233	71,609
1973	12,271	23,593	18,567	19,853	NA	74,282
1974	11,771	22,602	18,082	20,022	NA	72,543

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives), and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, and transportation of energy power.

(2) Data may not add to totals because of independent rounding.

SOURCE: U.S. Department of the Interior: 1947-1969: W.G. Dupree and J.A. West, "United States Energy Through the Year 2000," December 1972.
1970: U.S. Bureau of Mines, Minerals Yearbook 1973
1971-1972: U.S. Bureau of Mines, Press Release, February 1977
1973-1974: Department of Energy, Energy Information Administration, Monthly Energy Review

Section I
Table 8a

TOTAL U.S. GROSS CONSUMPTION BY CONSUMING SECTOR(1)
(Trillion Btu)

Year	Household and Commercial	Industrial	Transportation	Electrical Generation	Miscellaneous and Un-Accounted for	Total Consumption(2)
1975	11,596	20,381	18,205	20,350	NA	70,545
1976	12,250	21,472	19,058	21,573	NA	74,362
1977	11,873	21,908	19,773	22,713	NA	76,289
1978	11,907	21,775	20,558	23,724	NA	78,089
1979	11,525	22,752	20,429	24,128	NA	78,897
1980	10,720	21,106	19,658	24,505	NA	75,955
1981	10,044	19,742	19,459	24,760	NA	73,990
1982	10,063	17,498	19,029	24,260	NA	70,837
1983	9,715	16,764	19,097	24,929	NA	70,497
1984	10,086	18,208	19,839	25,937	NA	74,060
1985	9,827	17,575	20,077	26,482	NA	73,944
1986	9,576	17,303	20,734	26,665	NA	74,260
1987	9,622	17,734	21,120	27,559	NA	76,042

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imiported. Gross energy comprises inputs of primary fuels (or their derivatives), and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, and transportation of energy power.

(2) Data may not add to totals because of independent rounding and consumption of geothermal power and electricity produced from wood, waste and wind energy.

SOURCE: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE INDUSTRIAL SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	273,403	7,298	418.3	2,490	2,905,571	3,007	135	459	13,254
1948	244,214	6,516	427.0	2,530	3,164,928	3,276	147	500	12,822
1949	208,919	5,571	415.6	2,466	3,219,197	3,332	142	485	11,854
1950	223,507	5,957	442.4	2,641	3,601,757	3,727	164	559	12,884
1951	238,776	6,403	516.1	3,044	4,107,117	4,251	192	656	14,354
1952	211,146	5,673	515.0	3,034	4,242,986	4,391	200	682	13,780
1953	226,865	6,105	524.7	3,093	4,389,128	4,554	224	765	14,517
1954	179,148	4,860	529.8	3,118	4,383,197	4,537	235	802	13,317
1955	214,946	5,726	566.7	3,330	4,768,562	4,935	295	1,008	14,999
1956	217,810	5,805	626.6	3,688	4,922,139	5,095	326	1,113	15,701
1957	213,404	5,695	595.8	3,478	5,150,413	5,330	332	1,133	15,636
1958	175,600	4,675	570.3	3,292	5,352,294	5,540	323	1,102	14,609
1959	169,924	4,530	625.1	3,589	5,720,756	5,921	356	1,215	15,255
1960	175,225	4,673	643.9	3,682	6,074,114	6,287	383	1,306	15,948
1961	168,090	4,478	642.6	3,682	6,221,668	6,471	383	1,306	15,937
1962	169,995	4,527	678.8	3,880	6,579,008	6,842	411	1,402	16,651
1963	178,201	4,754	702.0	3,994	6,917,738	7,160	429	1,464	17,372
1964	189,561	5,063	744.6	4,184	7,198,706	7,451	453	1,544	18,242
1965	200,688	5,366	740.4	4,139	7,433,200	7,671	479	1,634	18,810
1966	204,945	5,472	781.0	4,353	7,948,486	8,203	524	1,788	19,816
1967	194,595	5,199	798.4	4,432	8,332,614	8,599	547	1,868	20,098
1968	191,602	5,124	897.2	4,965	8,987,095	9,274	599	2,044	21,407
1969	188,586	5,051	943.6	5,171	9,587,670	9,885	632	2,155	22,262

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000," December 1972

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE INDUSTRIAL SECTOR

Year	COAL(1) Thousand Short Tons	COAL(1) Trillion Btu	PETROLEUM(2) Million Barrels	PETROLEUM(2) Trillion Btu	NATURAL GAS Million Cubic Feet	NATURAL GAS Trillion Btu	ELECTRICITY PURCHASED(3) Billion Kilowatt-hours	ELECTRICITY PURCHASED(3) Trillion Btu	TOTAL ENERGY INPUTS Trillion Btu
1970	186,637	5,002	940.4	5,061	9,856,844	10,161	648	2,210	22,434
1971	158,866	4,303	947.9	5,088	9,577,212	9,874	682	2,327	21,592
1972	160,624	4,275	1,058.2	5,643	9,622,659	9,882	741	2,528	22,328
1973	163,076	4,057	1,637.6	9,113	10,184,314	10,388	686	2,341	25,926
1974	156,075	3,868	1,570.9	8,698	9,768,555	10,003	685	2,337	24,998(4)
1975	148,151	3,666	1,474.8	8,151	8,364,706	8,532	688	2,346	22,742(4)
1976	147,219	3,660	1,629.3	9,018	8,597,645	8,761	754	2,573	24,045
1977	139,792	3,453	1,762.6	9,786	8,474,975	8,636	786	2,682	24,606(4)
1978	135,287	3,314	1,783.3	9,890	8,404,528	8,539	809	2,761	24,659(4)
1979	145,903	3,593	1,952.7	10,576	8,397,839	8,549	842	2,873	25,688(4)
1980	127,573	3,155	1,771.6	9,524	8,197,267	8,394	815	2,781	23,852
1981	129,015	3,157	1,562.1	8,295	8,055,610	8,257	826	2,817	22,544
1982	105,511	2,552	1,481.8	7,797	6,935,673	7,116	745	2,542	20,018
1983	103,483	2,490	1,407.2	7,420	6,615,907	6,821	776	2,648	19,396
1984	118,215	2,842	1,500.2	7,885	7,232,039	7,449	839	2,862	21,058
1985	116,756	2,760	1,462.9	7,702	6,867,119	7,080	835	2,850	20,410
1986	111,826	2,643	1,486.9	7,934	6,504,373	6,693	808	2,758	20,043
1987	112,175	2,671	1,539.6	8,157	6,679,300	6,873	847	2,891	20,633

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

(4) Total includes small amounts of imported coke.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1987: Energy Information Administration, Monthly Energy Review

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE HOUSEHOLD AND COMMERCIAL SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	128,657	3,399	385.3	2,251	1,087,000	1,125	115	391	7,148
1948	122,994	3,238	436.0	2,539	1,219,402	1,262	130	442	7,481
1949	114,639	3,025	425.5	2,472	1,340,362	1,387	143	488	7,372
1950	110,422	2,913	526.2	3,038	1,586,207	1,642	160	546	8,139
1951	100,057	2,648	552.0	3,202	1,939,034	2,007	180	615	8,471
1952	91,212	2,416	577.1	3,350	2,137,635	2,213	195	666	8,645
1953	77,976	2,072	585.4	3,391	2,216,153	2,294	215	733	8,490
1954	65,425	1,752	630.4	3,650	2,479,205	2,566	234	797	8,765
1955	66,039	1,745	691.7	4,001	2,753,171	2,849	250	854	9,449
1956	61,685	1,629	721.8	4,183	3,044,435	3,151	274	935	9,898
1957	46,382	1,225	703.4	4,069	3,276,185	3,391	299	1,019	9,704
1958	45,005	1,187	788.3	4,568	3,586,025	3,712	321	1,095	10,562
1959	36,700	969	817.5	4,718	3,887,708	4,024	353	1,203	10,914
1960	37,180	983	853.3	4,923	4,123,389	4,268	370	1,262	11,436
1961	32,805	868	871.9	5,028	4,325,427	4,477	406	1,385	11,758
1962	32,955	872	907.7	5,227	4,685,231	4,849	437	1,490	12,438
1963	27,603	731	915.0	5,258	4,856,804	5,027	482	1,645	12,661
1964	22,949	609	903.7	5,191	5,162,009	5,343	525	1,792	12,935
1965	25,676	678	978.0	5,635	5,346,450	5,517	571	1,948	13,778
1966	25,587	677	1,000.1	5,766	5,760,999	5,945	616	2,101	14,489
1967	22,134	585	1,078.9	6,206	6,029,855	6,223	661	2,257	15,271
1968	19,983	529	1,069.5	6,129	6,250,997	6,451	723	2,467	15,576
1969	16,875	447	1,099.6	6,269	6,682,804	6,890	807	2,752	16,358

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West. "United States Energy Through The Year 2000," December 1972

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE HOUSEHOLD AND COMMERCIAL SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	16,114	427	1,128.4	6,453	6,984,007	7,108	879	3,000	16,988
1971	15,201	406	1,124.9	6,430	7,480,667	7,713	940	3,209	17,758
1972	11,708	308	1,168.4	6,666	7,733,964	7,943	1,019	3,478	18,395
1973	10,210	254	815.1	4,391	7,476,470	7,626	1,024	3,495	15,766
1974	10,370	257	743.2	3,996	7,341,797	7,518	1,018	3,475	15,246
1975	8,446	209	710.2	3,805	7,432,352	7,581	1,056	3,604	15,200
1976	8,165	203	776.7	4,181	7,719,333	7,866	1,098	3,747	15,997
1977	8,299	205	780.5	4,206	7,321,884	7,461	1,159	3,955	15,828
1978	8,736	214	756.2	4,070	7,503,937	7,624	1,206	4,116	16,023
1979	7,594	187	630.2	3,448	7,751,473	7,891	1,226	4,184	15,709
1980	5,863	145	555.1	3,035	7,347,953	7,540	1,276	4,355	15,075
1981	6,825	167	487.0	2,634	7,065,366	7,243	1,318	4,497	14,541
1982	7,731	187	454.2	2,449	7,244,639	7,427	1,338	4,566	14,629
1983	7,979	192	472.6	2,498	6,812,803	7,024	1,372	4,680	14,395
1984	8,693	209	491.4	2,585	7,079,612	7,292	1,443	4,922	15,008
1985	7,572	176	494.5	2,573	6,866,149	7,079	1,487	5,072	14,899
1986	7,447	176	491.8	2,576	6,632,653	6,825	1,539	5,251	14,827
1987	6,888	164	500.4	2,606	6,659,864	6,853	1,605	5,475	15,097

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponsing to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1970--U.S. Bureau of Mines, Minerals Yearbook 1972
1971-1972--U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1987--Energy Information Administration, Monthly Energy Review

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE TRANSPORTATION SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	113,324	3,030	1,050.3	5,761	Neg.	--	8	29	8,820
1948	98,295	2,624	1,126.6	6,157	Neg.	--	8	27	8,808
1949	70,915	1,892	1,137.8	6,183	Neg.	--	7	25	8,100
1950	63,783	1,701	1,248.8	6,785	125,546	130	7	24	8,640
1951	56,903	1,525	1,377.5	7,482	192,496	199	7	23	9,229
1952	40,428	1,086	1,451.3	7,868	207,207	214	6	22	9,190
1953	30,074	809	1,511.5	8,158	230,314	238	6	20	9,225
1954	19,060	516	1,551.4	8,358	230,615	239	6	18	9,131
1955	17,429	464	1,691.4	9,109	245,246	253	6	19	9,845
1956	14,187	378	1,756.2	9,448	295,972	306	5	17	10,149
1957	10,126	270	1,832.0	9,649	299,235	310	4	15	10,244
1958	5,015	133	1,825.1	9,819	312,221	323	5	16	10,291
1959	3,861	102	1,849.4	9,923	349,348	362	5	17	10,404
1960	3,294	87	1,934.1	10,372	347,075	359	5	18	10,836
1961	770	21	1,971.9	10,575	377,607	390	6	19	11,005
1962	687	18	2,051.3	11,001	382,496	396	5	18	11,433
1963	670	18	2,146.7	11,506	423,783	438	6	19	11,981
1964	711	19	2,198.9	11,791	435,570	451	6	20	12,281
1965	655	18	2,271.9	12,179	500,524	517	5	18	12,732
1966	609	16	2,382.6	12,777	535,353	552	5	16	13,361
1967	467	13	2,497.1	13,408	575,752	594	5	17	14,032
1968	417	11	2,703.8	14,535	590,965	610	5	18	15,174
1969	313	8	2,815.8	15,125	630,962	651	5	17	15,801

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior. W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000," December 1972.

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE TRANSPORTATION SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	298	8	2,923.8	15,720	772,166	745	5	16	16,489
1971	207	6	3,035.1	16,304	742,592	766	5	17	17,093
1972	163	4	3,217.5	17,290	766,156	787	5	17	18,098
1973	112	3	3,302.0	17,821	728,431	743	3	8	18,575
1974	38	2	3,225.1	17,396	668,945	685	3	9	18,091
1975	0	1	3,265.9	17,610	583,333	595	3	10	18,215
1976	0	0	3,428.3	18,499	548,577	559	3	10	19,068
1977	0	0	3,559.8	19,230	532,875	543	3	10	19,783
1978	0	0	3,702.4	20,019	530,512	539	3	9	20,567
1979	0	0	3,649.5	19,817	601,179	612	3	10	20,439
1980	0	0	3,494.3	19,009	634,766	650	3	11	19,669
1981	0	0	3,459.7	18,800	641,951	658	3	11	19,470
1982	0	0	3,396.3	18,418	596,491	612	3	11	19,040
1983	0	0	3,432.8	18,592	489,817	505	3	11	19,108
1984	0	0	3,558.0	19,295	529,126	545	4	13	19,852
1985	0	0	3,607.8	19,558	503,395	519	4	14	20,091
1986	0	0	3,731.3	20,235	484,937	499	4	12	20,746
1987	0	0	3,801.8	20,606	498,542	513	4	13	21,133

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1987: Energy Information Administration, Monthly Energy Review

UNITED STATES
DEMAND FOR ENERGY INPUTS FOR ELECTRICITY GENERATION BY UTILITIES

	COAL(1)		PETROLEUM		NATURAL GAS		HYDROPOWER(2)		NUCLEAR POWER		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Trillion Btu
1947	89,531	2,084	75.5	468	373,037	386	84,981	1,326	--	--	4,264
1948	99,586	2,392	71.7	444	478,097	495	88,535	1,393	--	--	4,724
1949	83,964	2,021	92.7	577	550,121	569	96,361	1,449	--	--	4,616
1950	91,871	2,228	106.3	662	628,919	651	102,671	1,440	--	--	4,981
1951	105,768	2,537	80.1	499	763,898	791	106,554	1,454	--	--	5,281
1952	107,071	2,588	78.8	492	910,117	942	111,977	1,496	--	--	5,518
1953	115,883	2,805	92.3	577	1,034,272	1,070	111,625	1,439	--	--	5,891
1954	118,401	2,866	76.8	480	1,165,498	1,206	113,980	1,388	--	--	5,940
1955	143,759	3,482	81.9	512	1,153,280	1,194	120,304	1,407	--	--	6,595
1956	158,279	3,815	79.4	497	1,239,311	1,283	129,775	1,487	--	--	7,082
1957	160,761	3,881	81.9	512	1,338,079	1,385	136,959	1,551	10	1	7,330
1958	155,714	3,743	82.4	515	1,372,853	1,421	147,581	1,636	165	2	7,317
1959	168,427	4,050	87.2	546	1,627,097	1,684	145,002	1,591	188	2	7,873
1960	176,633	4,251	90.1	564	1,724,763	1,785	153,958	1,657	518	6	8,263
1961	182,138	4,374	92.1	577	1,825,341	1,889	157,754	1,680	1,692	17	8,537
1962	193,128	4,636	92.4	579	1,965,590	2,034	172,458	1,821	2,270	23	9,093
1963	211,193	5,065	95.7	600	2,142,930	2,218	168,573	1,767	3,212	33	9,683
1964	225,271	5,395	101.4	636	2,321,889	2,403	182,258	1,907	3,341	34	10,375
1965	244,887	5,843	118.6	744	2,318,253	2,392	196,843	2,058	3,657	38	11,075
1966	266,394	6,327	144.2	905	2,608,768	2,692	199,030	2,073	5,520	57	12,054
1967	273,970	6,457	161.3	1,013	2,746,352	2,834	224,650	2,344	7,655	80	12,728
1968	296,942	6,994	188.0	1,181	3,143,858	3,245	225,242	2,342	12,528	130	13,892
1969	310,310	7,227	259.8	1,628	3,486,391	3,594	254,540	2,659	13,928	146	15,254
1970	322,357	7,261	333.8	2,087	3,894,019	4,015	252,571	2,650	21,801	229	16,242
1971	327,926	7,330	407.1	2,543	3,992,983	4,117	269,899	2,828	37,899	404	17,222
1972	350,196	7,836	503.7	3,134	3,978,673	4,086	280,470	2,911	54,032	576	18,543
1973	388,194	8,658	562.9	3,515	3,660,156	3,748	286,361	2,975	83,463	910	19,853
1974	391,809	8,534	539.4	3,365	3,443,249	3,519	313,733	3,276	113,968	1,272	20,022

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(1) Includes anthracite, bituminous, and lignite coals
(2) Includes net inputs and negligible amount of hydropower generated by industrial establishments

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000", December 1972
1970-1972: U.S. Bureau of Mines, Minerals Yearbook 1975
1973-1974: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

Section I
Table 12a

UNITED STATES
DEMAND FOR ENERGY INPUTS FOR ELECTRICITY GENERATION BY UTILITIES

	COAL(1)		PETROLEUM		NATURAL GAS		HYDROPOWER(2)		NUCLEAR POWER		TOTAL ENERGY INPUTS(3)
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Trillion Btu
1975	405,970	8,786	506.6	3,166	3,157,895	3,240	306,266	3,187	172,523	1,900	20,350
1976	448,360	9,720	556.2	3,477	3,081,134	3,152	292,297	3,032	191,093	2,111	21,573
1977	477,125	10,262	624.3	3,901	3,191,448	3,284	237,853	2,482	250,905	2,702	22,713
1978	481,222	10,238	637.8	3,987	3,188,588	3,297	300,164	3,110	276,392	3,024	23,724
1979	527,055	11,260	524.6	3,283	3,490,821	3,613	300,106	3,107	255,171	2,776	24,128
1980	569,289	12,123	421.2	2,634	3,681,159	3,810	296,918	3,085	251,128	2,739	24,505
1981	596,775	12,583	351.9	2,202	3,640,580	3,768	293,887	3,072	272,711	3,008	24,760
1982	593,659	12,582	250.6	1,568	3,225,869	3,342	338,482	3,528	282,760	3,131	24,260
1983	625,231	13,213	246.8	1,544	2,910,680	2,998	367,449	3,838	293,718	3,203	24,929
1984	664,423	14,020	205.7	1,286	3,111,111	3,220	360,787	3,684	327,677	3,553	25,937
1985	693,831	14,542	174.5	1,090	3,044,316	3,160	322,081	3,330	383,662	4,147	26,482
1986	685,069	14,444	232.1	1,452	2,602,515	2,691	336,434	3,472	414,083	4,475	26,665
1987	717,871	15,188	201.2	1,257	2,844,294	2,941	291,570	3,009	476,744	4,920	27,559

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes net inputs and negligible amount of hydropower generated by industrial establishments.
(3) Total includes small amounts of geothermal power and electricity from wood and waste.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

Section I
Table 13

WORLD PRIMARY ENERGY PRODUCTION(1)
(Quadrillion Btu)

Region and Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Canada	9.50	9.38	8.89	8.68	9.03	9.14	9.99	10.04	9.75	9.64	10.11
Mexico	1.87	2.15	2.44	2.74	3.14	3.76	4.51	5.80	6.78	7.82	7.70
United States	61.95	60.72	59.73	59.81	60.14	61.03	63.71	64.64	64.30	63.79	61.08
Total North America	73.32	72.25	71.06	71.22	72.31	73.93	78.22	80.48	80.83	81.25	78.90
Venezuela	8.13	7.29	5.90	5.79	5.69	5.52	6.04	5.71	5.58	5.22	4.99
Total Central & South America	12.85	12.09	10.62	10.67	10.88	11.19	12.23	12.15	12.13	12.04	12.21
France	1.78	1.82	1.88	1.71	2.00	2.02	2.03	2.26	2.65	2.62	2.97
West Germany	4.92	4.95	4.87	5.14	5.12	5.12	5.44	5.44	5.57	5.72	5.53
Italy	1.06	1.07	1.08	1.11	1.15	1.13	1.10	1.07	1.11	1.16	1.12
Netherlands	2.52	2.86	3.16	3.44	2.90	2.49	2.69	3.32	3.10	2.67	2.62
Norway	.83	.88	1.22	1.47	1.47	2.07	2.68	3.02	3.06	3.11	3.41
United Kingdom	4.66	4.47	4.97	5.39	6.58	7.19	8.24	8.40	8.71	9.49	9.92
Total Western Europe	19.58	20.01	21.36	22.34	23.93	24.81	27.40	28.65	29.73	30.65	31.86
Iran	13.27	13.68	12.23	13.43	12.88	11.93	7.46	3.91	3.28	5.12	5.67
Iraq	4.35	4.25	4.89	5.25	5.08	5.53	7.49	5.45	2.16	2.19	2.17
Kuwait	6.75	5.67	4.68	4.84	4.46	4.90	5.78	3.88	2.70	1.98	2.51
Saudi Arabia	16.63	18.68	15.68	18.88	20.51	18.45	21.24	22.48	22.57	14.86	11.69
United Arab Emirates	3.27	3.56	3.56	4.20	4.45	4.09	4.12	3.89	3.45	3.00	2.91
Total Middle East	46.61	48.33	43.58	49.13	49.77	47.30	48.65	42.13	36.73	29.54	27.29
Algeria	2.47	2.35	2.34	2.65	2.63	3.28	3.16	2.75	2.95	3.11	3.46
Libya	4.72	3.32	3.27	4.26	4.53	4.40	4.63	4.03	2.57	2.61	2.52
Nigeria	4.45	4.89	3.88	4.51	4.50	4.06	4.95	4.50	3.18	2.86	2.77
South Africa	1.48	1.57	1.65	1.84	2.03	2.15	2.46	2.74	3.09	3.24	3.45
Total Africa	14.81	13.93	13.19	15.49	16.44	16.70	18.10	17.35	15.09	15.42	16.12
Australia	3.25	3.44	3.64	3.35	3.43	3.51	3.66	3.53	3.89	4.04	4.24
China	13.14	14.25	15.11	15.35	16.16	18.05	18.53	18.32	18.10	19.13	20.46
India	2.22	2.36	2.68	2.88	2.95	3.14	3.30	3.35	4.09	4.43	4.87
Indonesia	2.90	2.99	2.90	3.38	3.85	3.71	3.83	4.16	4.27	3.65	3.84
Total Far East & Oceania	26.17	28.04	29.71	30.59	32.09	34.53	35.99	36.53	37.47	38.90	41.54
Poland	4.94	5.09	5.37	5.00	5.18	5.36	5.51	5.28	4.54	5.16	5.25
USSR	39.28	41.77	43.62	47.46	49.79	52.11	53.88	55.67	56.71	58.27	59.96
Total Eastern Europe & USSR	51.44	54.17	56.51	60.23	62.95	65.40	67.52	69.20	69.67	72.18	74.15
TOTAL WORLD	244.78	248.81	246.03	259.67	268.37	273.87	288.31	286.50	281.66	279.98	282.07

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(1) Includes only crude oil, lease condensate, natural gas plant liquids, dry natural gas, coal, net hydroelectric power and net nuclear power.

Source: Department of Energy, Energy Information Administration, International Energy Annual.

Section I
Table 13a

WORLD PRIMARY ENERGY PRODUCTION(1)
(Quadrillion BTU)

REGION AND COUNTRY	1984	1985	1986	1987(p)
Canada	10.98	11.76	11.67	12.17
Mexico	7.88	7.74	7.15	7.38
United States	65.67	64.55	63.99	64.35
Total North America	84.53	84.06	82.81	83.90
Venezuela	5.02	4.77	5.14	5.09
Total Central & South America	13.13	13.43	14.08	14.08
France	3.38	3.56	3.82	3.94
West Germany	5.73	6.03	5.77	5.79
Italy	1.17	1.18	1.26	1.18
Netherlands	2.71	2.82	2.71	2.78
Norway	3.65	3.82	3.97	4.48
United Kingdom	8.86	10.18	10.63	10.47
Total Western Europe	32.33	34.91	35.76	36.73
Iran	5.29	5.57	5.06	5.94
Iraq	2.61	3.09	3.66	4.55
Kuwait	2.76	2.44	3.36	3.23
Saudi Arabia	11.29	8.55	11.91	10.56
United Arab Emirates	3.00	3.29	3.68	4.12
Total Middle East	27.66	25.67	30.63	31.54
Algeria	3.71	3.77	3.56	3.75
Libya	2.53	2.46	2.43	2.28
Nigeria	3.12	3.35	3.33	3.03
South Africa	3.87	4.17	4.26	4.22
Total Africa	17.53	18.44	18.18	18.29
Australia	4.42	5.34	5.49	5.99
China	22.39	24.14	24.90	26.08
India	5.21	5.52	5.96	5.77
Indonesia	4.27	4.24	4.33	4.28
Total Far East & Oceania	45.10	48.99	51.10	52.95
Poland	5.37	5.54	5.72	5.86
USSR	62.00	63.81	66.38	68.46
Total Eastern Europe & USSR	76.51	78.64	81.49	83.84
TOTAL WORLD	296.79	304.12	314.05	321.33

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(1) Includes only crude oil, lease condensate, natural gas plant liquids, dry natural gas, coal, net hydroelectric power and net nuclear power.

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

Section I
Table 14

WORLD COAL PRODUCTION(1)
(Million Short Tons)

Region and Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Canada	23	23	28	28	32	34	37	40	44	47	50	63
Mexico	5	6	6	6	7	7	8	8	8	8	10	10
United States	599	610	655	685	697	670	781	830	824	838	782	896
Total North America	626	639	688	719	736	711	826	878	876	894	841	969
Total Central & South America	8	9	9	10	10	10	16	16	14	16	16	18
West Germany	238	244	238	247	229	228	239	239	241	247	236	233
United Kingdom	143	121	142	137	135	136	135	141	138	137	127	55
Yugoslavia	36	37	39	41	43	44	46	52	58	60	65	72
Total Western Europe	508	488	509	518	506	509	529	543	561	577	571	510
South Africa	69	73	77	85	94	100	114	127	144	151	161	179
Total Africa	75	78	82	91	100	106	121	133	149	157	167	184
Australia	94	100	105	109	111	114	119	116	130	140	146	153
China	520	548	570	586	606	681	698	684	683	734	788	870
India	89	96	109	116	115	116	118	125	142	148	158	168
Total Middle East, Far East & Oceania	800	842	890	911	934	1,014	1,042	1,036	1,068	1,136	1,205	1,307
Czechoslovakia	120	122	127	130	134	136	137	136	137	139	140	143
East Germany	272	269	272	273	280	279	282	285	294	304	309	327
Poland	216	222	233	241	250	258	264	254	219	250	258	267
U.S.S.R.	736	755	773	784	796	798	792	790	776	792	789	785
Total Eastern Europe & USSR	1,431	1,454	1,494	1,513	1,546	1,560	1,571	1,566	1,529	1,593	1,601	1,635
TOTAL WORLD	3,447	3,511	3,673	3,763	3,834	3,911	4,105	4,173	4,198	4,375	4,402	4,623

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(1) Includes anthracite, subanthracite, bituminous, subbituminous, lignite and brown coal.

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

Section I
Table 14a

WORLD COAL PRODUCTION(1)
(Million Short Tons)

Region and Country	1985	1986	1987(p)
Canada	67	64	67
Mexico	9	9	9
United States	884	890	917
Total North America	960	964	993
Total Central & South America	21	23	24
West Germany	231	222	211
United Kingdom	104	119	115
Yugoslavia	75	77	83
Total Western Europe	570	584	577
South Africa	192	195	194
Total Africa	198	201	201
Australia	186	187	206
China	937	959	1,014
India	173	188	203
Total Middle Ease, Far East & Oceania	1,422	1,463	1,552
Czechoslovakia	140	139	139
East Germany	344	343	342
Poland	275	286	293
U.S.S.R.	798	825	830
Total Eastern Europe & USSR	1,671	1,709	1,723
TOTAL WORLD	4,844	4,944	5,071

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(1) Includes anthracite, subanthracite, bituminous, subbituminous, lignite and brown coal.
NA=Not Available

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

U.S. GOVERNMENT ENERGY USE BY AGENCY, BY SOURCE
(Fiscal Year, Trillion BTU)

1977

	Petroleum							
AGENCY	Motor Gasoline	Distillate and Residual Fuel Oils	Other(1)	Total	Electricity	Natural Gas	Coal and Other(2)	Total
Defense	31.9	308.4	623.3	936.6	291.2	98.0	45.7	1,398.4
Energy	1.3	5.2	0.4	6.9	51.4	9.9	19.7	87.9
Postal Service	10.8	3.8	0.1	14.7	42.2	4.4	1.6	62.9
GSA	0.2	2.7	0	2.9	29.3	4.1	4.9	37.9
Veteran's Admin.	0.6	7.3	0	7.9	16.4	12.0	1.7	41.1
Transportation	1.6	8.3	5.7	15.5	11.7	1.2	0.3	28.8
NASA	0.4	1.5	1.3	3.2	16.5	3.1	1.2	24.0
Agriculture	4.9	1.2	0.3	6.3	2.7	1.7	0	10.8
Interior	2.8	2.5	0.6	5.9	5.6	1.9	0.1	13.8
Health & Human Serv.	0.7	3.1	0.1	3.9	4.2	1.7	0.1	9.9
Justice	2.0	0.9	0.1	3.0	2.3	1.9	0.5	7.5
Other(3)	3.8	3.7	0.4	7.9	6.3	1.3	0.4	15.9
TOTAL	60.9	348.5	632.1	1,041.6	479.7	141.2	76.1	1,738.6

1987

	Petroleum							
AGENCY	Motor Gasoline	Distillate and Residual Fuel Oils	Other(1)	Total	Electricity	Natural Gas	Coal and Other(2)	Total
Defense(p)	20.2	273.0	697.5	990.7	352.6	100.4	52.4	1,497.8
Energy	1.4	3.1	0.6	5.1	63.5	6.1	18.5	93.2
Postal Service	9.2	3.9	0.2	13.3	34.9	4.3	1.0	53.4
GSA	0.1	0.5	0	0.6	26.3	2.4	3.0	32.4
Veteran's Admin.	0.5	2.4	0	2.9	24.3	13.7	1.2	42.0
Transportation	1.2	7.5	5.4	14.1	13.1	1.1	0	28.3
NASA	0.2	0.9	1.3	2.3	19.7	2.6	0.4	25.1
Agriculture	3.4	0.3	0.2	3.9	5.9	1.6	0	11.4
Interior	2.0	1.3	0.9	4.2	4.2	1.0	0.2	9.7
Health & Human Serv.	0.4	2.5	0.1	3.0	6.6	1.6	0	11.2
Justice(p)	1.9	0.4	0.1	2.4	4.1	1.7	0.5	8.7
Other(3)(p)	3.0	1.9	0.7	5.7	8.1	1.5	0.3	17.1
TOTAL	43.5	297.7	707.0	1,048.2	563.3	138.0	80.2	1,830.3

(p) Preliminary.
(1) Includes aviation gasoline, jet fuel, and liquefield petroleum gases.
(2) Includes purchased steam.
(3) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review 1987.

U.S. GOVERNMENT ENERGY USE(1)
(Fiscal Year, Trillion BTU)

AGENCY	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Defense	1,558.1	1,386.8	1,398.4	1,365.7	1,384.6	1,394.8	1,455.4	1,484.3	1,475.1	1,524.1	1,509.6
Energy	85.2	87.2	87.9	87.1	86.9	84.0	85.3	89.1	91.3	95.5	96.7
Postal Service	59.2	58.3	62.9	58.6	56.0	52.3	50.9	49.4	48.4	50.5	50.9
GSA	43.0	41.1	41.1	41.3	40.5	38.9	39.1	38.9	37.8	35.4	35.4
Veteran's Admin.	39.2	36.5	37.9	39.4	38.5	38.2	37.4	38.0	38.7	40.6	40.6
Transportation	28.5	27.4	28.8	28.9	27.6	27.6	28.0	28.5	28.7	29.5	29.5
NASA	26.4	25.1	24.0	22.4	22.4	21.4	21.2	21.8	22.4	23.0	23.3
Agriculture	11.9	11.6	10.8	11.2	11.6	11.2	10.9	10.4	10.4	10.7	10.2
Interior	12.3	13.1	13.5	12.3	13.6	11.7	10.7	10.7	10.8	11.8	10.6
Health & Human Serv.	9.3	9.6	9.9	9.6	9.7	9.5	10.6	10.2	10.3	10.8	11.3
Justice	7.1	7.1	7.5	7.4	8.1	7.4	7.1	7.7	7.6	8.9	8.1
Other(2)	14.8	15.0	15.9	17.1	16.8	16.6	17.1	18.5	17.1	17.7	16.5
TOTAL	1,895.0	1,718.9	1,738.6	1,701.0	1,716.3	1,713.5	1,773.7	1,807.5	1,798.6	1,860.2	1,842.7
ENERGY SOURCE											
Petroleum	1,162.0	1,015.8	1,041.5	1,002.3	1,012.7	1,011.5	1,065.8	1,082.5	1,060.7	1,093.6	1,067.4
Motor Gasoline	63.4	59.9	60.9	59.6	58.6	56.1	52.9	52.9	51.4	51.0	50.5
Aviation Gasoline	21.1	11.6	8.8	6.2	4.7	4.9	4.6	3.6	2.6	1.9	1.9
Jet Fuel	707.4	610.0	619.2	601.2	618.6	638.7	653.3	672.7	673.3	693.7	705.6
Distillate & Residual	364.7	329.7	348.5	332.3	327.1	307.8	351.3	349.5	329.4	342.9	305.4
LPG's	5.4	4.6	4.1	3.0	3.7	4.0	3.7	3.8	4.0	4.1	4.0
Electricity	481.2	473.5	479.7	479.2	479.9	482.2	491.5	501.6	515.2	530.1	548.2
Natural Gas	166.2	151.8	141.2	144.7	148.9	147.3	142.2	146.2	147.8	157.4	146.7
Coal	77.9	71.3	68.4	66.0	65.1	63.6	65.1	68.6	62.4	65.3	64.0
Purchased Steam	7.6	6.3	7.7	8.7	9.7	9.1	9.1	8.6	12.4	13.8	16.4
TOTAL	1,895.0	1,718.9	1,738.6	1,701.0	1,716.3	1,713.5	1,773.7	1,807.5	1,798.6	1,860.2	1,842.7

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(1) Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. However, other energy used by U.S. agencies that produce electricity or enrich uranium is included.

(2) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission, and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review.

Section I
Table 16a

U.S. GOVERNMENT ENERGY USE(1)
(Fiscal Year, Trillion BTU)

AGENCY	1986	1987(p)
Defense	1,488.1	1,497.8
Energy	92.0	93.2
Postal Service	51.5	53.4
GSA	34.1	32.4
Veteran's Admin.	41.8	42.0
Transportation	28.1	28.3
NASA	24.6	25.1
Agriculture	10.6	11.4
Interior	10.0	9.7
Health & Human Serv.	10.7	11.2
Justice	8.7	8.7
Other(2)	16.8	17.1
TOTAL	1,817.0	1,830.3
ENERGY SOURCE		
Petroleum	1,058.8	1,048.2
Motor Gasoline	45.3	43.5
Aviation Gasoline	1.4	0.9
Jet Fuel	710.2	702.3
Distillate & Residual	298.0	297.7
LPG's	3.9	3.8
Electricity	539.8	563.3
Natural Gas	138.7	138.0
Coal	63.8	60.5
Purchased Steam	15.9	19.7
TOTAL	1,817.0	1,830.3

(p) Preliminary.

(1) Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. however, other energy used by U.S. agencies that produce electricity or enrich uranium is included.

(2) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission, and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review 1987.

BASIC PETROLEUM DATA BOOK

SECTION II. RESERVES, CRUDE OIL

Table 1. Estimated Proved World Reserves of Crude Oil

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Section II
Table 1

ESTIMATED PROVED RESERVES OF CRUDE OIL
ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	United States	Canada	Latin America	Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist Nations	Total World
1948	21,487.7	125.0	10,085.0	31,697.7	28,550.0	100.0	1,300.0	50.0	61,697.7	6,500.0	68,197.7
1949	23,280.4	500.0	10,880.0	34,660.4	32,621.0	122.0	1,372.0	179.0	68,954.4	4,645.0	73,599.4
1950	24,649.5	1,200.0	11,400.8	37,250.3	32,413.0	202.5	1,557.0	289.0	71,711.7	4,741.0	76,452.7
1951	25,268.4	1,202.6	11,525.0	37,996.0	41,567.0	188.0	1,765.0	445.4	81,961.4	7,965.0	89,926.4
1952	27,468.0	1,376.6	12,710.9	41,555.5	51,320.0	175.0	1,965.5	501.5	95,517.5	7,927.0	103,444.5
1953	27,960.6	1,679.5	11,883.5	41,523.6	64,825.0	163.0	2,062.0	472.7	109,046.3	9,408.0	118,454.3
1954	28,944.8	1,845.4	13,182.0	43,972.3	78,160.0	158.0	2,583.0	641.5	125,514.8	9,455.0	134,969.8
1955	29,560.7	2,207.6	14,356.0	46,124.4	97,459.0	112.0	2,708.0	1,049.2	147,452.6	10,047.0	157,499.6
1956	30,012.2	2,509.5	15,515.0	48,036.7	126,271.0	169.0	3,000.0	1,261.0	178,737.7	10,833.0	189,570.7
1957	30,434.6	2,849.4	17,474.0	50,758.0	144,470.0	285.0	6,140.0	1,305.0	202,958.0	25,000.0	227,958.0
1958	30,300.4	2,874.6	21,003.5	54,178.4	169,566.0	814.0	8,578.0	1,304.0	234,440.4	26,200.0	260,640.4
1959	30,535.9	3,165.9	21,843.0	55,544.8	173,951.0	4,118.5	9,646.5	1,437.0	244,697.8	27,705.0	272,402.8
1960	31,719.3	3,497.1	24,435.6	59,652.1	181,436.0	7,273.5	10,175.5	1,496.0	260,033.1	30,002.0	290,035.1
1961	31,613.2	3,678.5	25,061.8	60,353.6	183,160.0	8,099.5	10,906.5	1,722.0	264,241.6	33,502.0	297,743.6
1962	31,758.5	4,173.6	24,706.0	60,638.1	188,204.0	9,709.5	10,867.6	1,736.0	271,155.2	34,252.0	305,407.2
1963	31,389.2	4,480.7	24,225.5	60,095.4	193,975.0	12,345.5	11,331.1	1,791.0	279,538.0	29,976.0	309,514.0
1964	30,970.0	4,881.5	24,305.0	60,156.5	207,368.0	16,375.5	11,621.2	1,925.6	297,446.8	29,500.0	326,946.8
1965	30,990.5	6,177.5	25,525.0	62,693.1	212,180.0	19,395.6	11,613.7	2,035.6	307,918.0	30,750.0	338,668.0
1966	31,352.4	6,711.2	25,170.5	63,234.1	215,360.0	23,049.0	11,008.8	2,085.0	314,736.9	33,377.0	348,118.9
1967	31,452.1	7,791.8	27,100.3	66,344.2	235,614.6	32,355.5	11,808.5	1,924.5	348,047.3	33,838.0	381,885.3
1968	31,376.7	8,168.9	26,907.3	66,452.8	249,209.0	42,285.3	11,815.9	2,017.0	371,780.0	35,773.0	407,553.0
1969	30,707.1	8,381.6	28,782.8	67,871.5	270,760.0	44,568.8	13,720.2	1,937.0	398,857.5	55,877.0	454,734.5
1970	29,631.9	8,619.8	29,179.8	67,431.4	333,506.0	54,679.5	13,138.2	1,779.0	470,534.1	60,000.0	530,534.1
1971	39,001.3	8,559.0	26,185.3	73,745.6	344,574.9	74,757.5	14,408.6	3,708.5	511,195.1	100,000.0	611,195.1
1972	38,063.0	8,333.1	31,558.8	77,954.8	367,386.0	58,886.2	15,604.5	14,222.0	534,053.5	98,500.0	632,553.5
1973	36,339.4	8,020.1	32,601.8	76,961.3	355,852.0	106,402.0	14,922.3	12,082.0	566,219.6	98,000.0	664,219.6
1974	35,299.8	7,674.2	31,640.3	74,614.2	350,162.5	67,303.8	15,635.0	15,991.0	523,706.5	103,000.0	626,706.5
1975	34,250.0	7,171.2	40,578.0	81,999.2	403,858.2	68,299.5	21,047.7	25,814.0	601,018.5	111,400.0	712,418.5
1976	32,682.1	6,653.0	35,368.0	74,703.1	368,410.6	65,085.2	21,234.2	25,487.7	554,920.8	103,000.0	657,920.8
1977	33,502.0	6,247.1	29,609.0	69,358.0	367,681.2	60,570.2	19,391.1	24,538.8	541,539.4	101,100.0	642,639.4
1978	31,780.0	5,970.9	40,270.0	78,020.9	366,166.0	59,200.2	19,749.3	26,862.5	549,998.8	98,000.0	647,998.8
1979	31,355.0	6,860.0	41,246.5	79,461.5	369,996.0	57,892.1	20,007.2	23,966.0	551,322.8	94,000.0	645,322.8
1980	27,051.3	6,800.0	56,472.5	90,323.8	361,947.3	57,072.1	19,355.2	23,476.4	522,174.8	90,000.0	642,174.8
1981	29,805.0	6,400.0	69,489.8	105,694.8	362,071.0	55,148.4	19,630.5	23,085.0	565,629.7	86,300.0	651,929.7
1982	29,426.0	7,300.0	84,982.3	121,708.3	362,840.0	56,171.6	19,150.8	24,634.5	584,505.2	85,845.0	670,350.2
1983	27,858.0	7,020.0	78,462.1	113,360.1	369,285.9	57,821.7	19,756.1	22,923.7	583,147.4	85,115.0	668,262.4
1984	27,735.0	6,730.0	81,675.9	116,140.9	370,100.8	56,907.0	18,969.4	23,019.5	585,137.6	84,600.0	669,737.6
1985	28,446.0	7,075.0	83,315.7	117,690.7	398,380.8	55,540.6	18,529.9	24,425.5	615,713.4	84,100.0	699,813.4

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(1) For 1971-1974 figures include 6 billion barrels in Prudhoe Bay, Permo-Triassic Reservoir, Alaska (discovered in 1968) which are not yet available for production due to lack of transportation facilities.

Source: 1948-1976--United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
1977-1985--United States, U.S. Energy Information Administration
Canada, Canadian Petroleum Association (1952-1980)
Rest of the world, Oil and Gas Journal, "Worldwide Report" Issues

Section II
Table 1a

ESTIMATED PROVED RESERVES OF CRUDE OIL
ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist Nations	Total World
1986	28,416.0	6,500.0	84,242.4	119,158.4	398,035.7	56,734.1	18,855.8	26,412.6	619,196.6	81,370.0	700,566.6
1987	26,889.0	6,850.0	88,755.3	122,494.3	401,878.7	55,194.1	19,023.5	21,938.1	620,528.7	79,250.0	699,778.7
1988	27,256.0	6,825.0	114,332.0	148,413.0	564,680.3	55,249.7	19,353.7	22,447.8	810,144.5	79,200.0	889,344.5
1989	26,500.0	6,785.5	121,950.7	155,236.2	571,518.8	56,963.8	21,367.4	18,556.6	823,642.8	83,800.0	907,442.8

Source: U.S.--DOE/EIA, Crude Oil, Natural Gas and Natural Gas Liquids Reserves Report, Annual.
Rest of world--Oil and Gas Journal, "Worldwide Report" issue.
1989--Oil and Gas Journal, "Worldwide Report" issue.

Section II
Table 2

THE RESERVES OF UNITED STATES CRUDE OIL
(Thousands of barrels)

Year	Proved Reserves at Start of Year	Revisions Extensions and Discoveries, During Year	Production During Year (1)	Proved Reserves at Year-end	Indicated Years Supply of Year-end Proved Reserves
1947	20,873,560	2,464,570	1,850,445	21,487,685	11.6
1948	21,487,685	3,795,207	2,002,448	23,280,444	11.6
1949	23,280,444	3,187,845	1,818,800	24,649,489	13.6
1950	24,649,489	2,562,685	1,943,776	25,268,398	13.0
1951	25,268,398	4,413,954	2,214,321	27,468,031	12.4
1952	27,468,031	2,749,288	2,256,765	27,960,554	12.4
1953	27,960,554	3,296,130	2,311,856	28,944,828	12.5
1954	28,944,828	2,873,037	2,257,119	29,560,746	13.1
1955	29,560,746	2,870,724	2,419,300	30,012,170	12.4
1956	30,012,170	2,974,336	2,551,857	30,434,649	11.9
1957	30,434,649	2,424,800	2,559,044	30,300,405	11.8
1958	30,300,405	2,608,242	2,372,730	30,535,917	12.9
1959	30,535,917	3,666,745	2,483,315	31,719,347	12.8
1960	31,719,347	2,365,328	2,471,464	31,613,211	12.8
1961	31,613,211	2,657,567	2,512,273	31,758,505	12.6
1962	31,758,505	2,180,896	2,550,178	31,389,223	12.3
1963	31,389,223	2,174,110	2,593,343	30,969,990	11.9
1964	30,969,990	2,664,767	2,644,247	30,990,510	11.7
1965	30,990,510	3,048,079	2,686,198	31,352,391	11.7
1966	31,352,391	2,963,978	2,864,242	31,452,127	11.0
1967	31,452,127	2,962,122	3,037,579	31,376,670	10.3
1968	31,376,670	2,454,635	3,124,188	30,707,117	9.8
1969	30,707,117	2,120,036	3,195,291	29,631,862	9.3
1970	29,631,862	12,688,918(2)	3,319,445	39,001,335(2)	11.7(2)
1971	39,001,335(2)	2,317,732	3,256,110	38,062,957(2)	11.7(2)
1972	38,062,957(2)	1,557,848	3,281,397	36,339,408(2)	11.1(2)
1973	36,339,408(2)	2,145,831	3,185,400	35,299,839(2)	11.1(2)
1974	35,299,839(2)	1,993,573	3,043,456	34,249,956(2)	11.3(2)

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(1) Production is the amount originally estimated and used by API in prior reserves reports.
(2) Figures include 9.6 billion barrels located in Prudhoe Bay, Alaska (discovered in 1968).

Source: American Petroleum Institute, Committee on Reserves and Productive Capacity.

Section II
Table 2a

THE RESERVES OF UNITED STATES CRUDE OIL
(Thousands of barrels)

Year	Proved Reserves at Start of Year	Revisions Extensions and Discoveries, During Year	Production During Year (1)	Proved Reserves at Year-end	Indicated Years Supply of Year-end Proved Reserves
1975	34,249,956(2)	1,318,463	2,886,292	32,682,127(2)	11.3(2)
1976	32,682,127(2)	1,085,291	2,825,252	30,942,166(2)	11.0(2)
1977(3)	33,502,000	1,140,000	2,862,000	31,780,000	11.1
1978	31,780,000	2,583,000	3,008,000	31,355,000	10.4
1979	31,355,000	1,410,000	2,955,000	29,810,000	10.1
1980	29,810,000	2,970,000	2,975,000	29,805,000	10.0
1981	29,805,000	2,570,000	2,949,000	29,426,000	10.0
1982	29,426,000	1,382,000	2,950,000	27,858,000	9.4
1983	27,858,000	2,897,000	3,020,000	27,735,000	9.2
1984	27,735,000	3,748,000	3,037,000	28,446,000	9.4
1985	28,446,000	3,022,000	3,052,000	28,416,000	9.3
1986	28,416,000	1,446,000	2,973,000	26,889,000	9.0
1987	26,889,000	3,240,000	2,873,000	27,256,000	9.5

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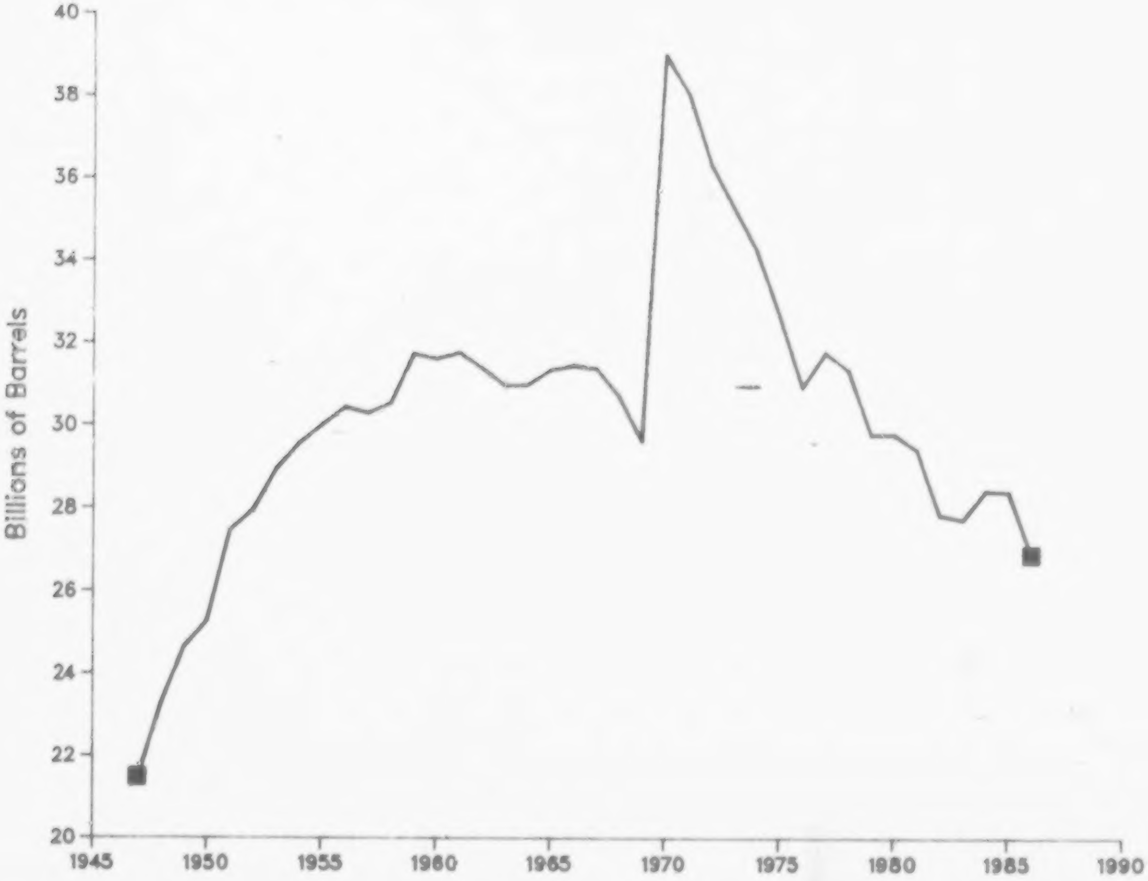
(1) Production is the amount originally estimated and used by API in prior reserves reports (through 1979).
(2) Figures include approximately 10.0 billion barrels located in Prudhoe Bay, Alaska.
(3) Beginning in 1977, crude oil reserves estimates come from the Department of Energy. Therefore, reserves at year-end 1976 do not equal reserves at start of year 1977. These figures include crude oil only, i.e., they exclude lease condensate.

Source: American Petroleum Institute, Committee on Reserves
1977-1987: U.S. Department of Energy, U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves

Section II
Table 2b

U.S. CRUDE OIL RESERVES



Source: API and Department of Energy

Section II
Table 3

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Alabama	2.8	3.5	3.5	5.4	7.9	15.6	17.2	15.6	20.6	37.5	34.4	38.6	34.2
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	296.9	300.0	297.5	341.7	336.5	352.3	358.2	351.4	329.5	317.7	305.0	317.9	312.9
California	3,295.0	3,763.6	3,822.8	3,733.6	3,760.9	3,854.2	3,919.4	3,888.6	3,801.4	3,771.4	3,759.8	3,866.4	3,762.5
Colorado	381.9	365.5	344.8	339.5	325.2	305.7	319.3	328.7	334.0	363.8	309.9	392.1	381.0
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Illinois	355.4	393.4	468.1	564.2	646.3	619.5	624.8	658.4	691.2	700.0	654.7	607.6	594.4
Indiana	46.0	49.1	50.2	57.4	50.7	55.5	62.1	67.2	61.5	67.7	66.7	71.5	74.0
Kansas	562.7	674.4	738.4	732.2	791.9	917.0	913.3	978.4	998.1	992.2	947.5	992.4	917.5
Kentucky	64.6	59.2	56.2	55.9	58.5	55.6	81.7	85.3	107.5	148.4	138.0	126.4	136.3
Louisiana	1,791.0	1,869.3	1,909.8	2,185.1	2,284.8	2,557.5	2,759.7	2,961.7	3,255.3	3,675.4	3,857.6	4,044.0	4,660.1
Michigan	69.7	69.4	66.5	78.7	64.1	57.4	60.7	59.6	58.9	55.3	49.5	45.0	55.3
Mississippi	303.7	365.4	402.9	385.7	385.4	358.8	350.1	412.3	387.7	368.2	359.6	378.7	389.3
Montana	114.7	118.9	112.4	111.3	108.4	156.2	209.0	272.4	298.9	331.4	320.0	337.8	309.3
Nebraska	0.9	0.9	1.6	9.7	15.9	21.8	25.6	38.0	57.7	62.9	63.1	69.2	80.6
New Mexico	530.5	552.2	592.2	592.0	611.6	733.4	814.9	805.9	819.7	835.4	831.7	894.1	1,025.8
New York	71.5	67.1	62.9	58.8	57.1	52.9	49.1	45.8	42.9	40.2	37.5	35.8	34.2
North Dakota	--	--	--	--	5.0	76.2	128.3	134.3	185.5	195.8	258.2	314.1	381.9
Ohio	29.0	28.5	27.7	27.3	26.4	27.4	31.8	36.8	56.0	63.6	68.2	70.8	74.1
Oklahoma	953.0	1,250.4	1,329.9	1,396.9	1,476.5	1,557.6	1,752.2	1,955.3	2,016.0	2,009.8	1,941.5	1,898.1	1,864.7
Pennsylvania	122.7	109.8	103.4	106.4	95.0	121.7	111.1	101.8	93.3	134.7	126.5	119.8	113.6
South Dakota	--	--	--	--	--	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	11,777.5	12,484.2	13,509.7	13,581.6	15,315.0	14,916.2	14,998.6	14,982.0	14,933.5	14,783.4	14,555.1	14,322.2	14,859.7
Utah	(1)	(1)	15.8	21.6	29.7	42.4	37.9	36.4	37.1	61.4	140.0	198.6	194.5
West Virginia	36.1	36.7	38.0	39.0	38.8	37.2	36.6	37.3	47.0	51.2	52.5	52.1	51.3
Wyoming	679.3	715.8	691.6	841.0	973.4	1,064.7	1,279.1	1,303.6	1,373.6	1,363.2	1,419.7	1,408.7	1,402.9
Miscellaneous	3.0	3.0	3.6	3.4	8.1	3.8	4.1	3.8	5.2	4.5	3.6	4.0	9.2
TOTAL U.S.(2)	21,487.7	23,380.4	24,649.5	25,268.4	27,468.0	27,960.6	28,914.8	29,560.7	30,012.2	30,434.6	30,300.4	30,535.9	31,719.3

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annual Reports.

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Alabama	33.3	35.9	37.5	45.1	49.9	66.4	85.3	78.8	72.7	67.1	65.3	61.5	56.7
Alaska	(1)	(1)	(1)	74.9	82.9	159.8	321.4	380.8	373.2	432.3	10,148.8	10,116.2	10,096.3
Arkansas	302.0	280.7	246.8	225.3	205.2	201.0	181.3	176.4	159.3	127.3	129.6	117.6	113.1
California	3,658.5	3,614.7	3,648.4	3,599.7	4,125.5	4,567.5	4,608.0	4,369.4	4,340.7	4,242.7	3,984.0	3,705.8	3,553.7
Colorado	363.9	419.7	388.3	368.4	346.3	327.2	343.5	339.9	420.5	400.6	389.0	332.8	326.4
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	74.8	204.1	208.1
Illinois	555.9	503.2	460.2	416.6	391.5	371.2	362.3	335.5	313.8	272.1	228.7	208.8	174.9
Indiana	66.3	62.0	61.0	63.4	60.6	57.6	47.9	47.2	40.2	41.3	37.0	30.9	29.4
Kansas	883.8	878.0	862.4	841.3	796.5	751.6	726.4	625.1	600.8	566.0	539.3	501.6	453.4
Kentucky	128.9	116.5	108.6	100.5	117.9	107.6	101.2	94.3	79.5	73.1	61.4	52.5	48.2
Louisiana	4,785.4	4,931.2	5,086.6	5,088.6	5,162.5	5,245.8	5,408.4	5,455.9	5,608.2	5,689.2	5,710.3	5,399.0	5,028.5
Michigan	77.8	78.8	75.0	68.5	58.3	52.8	70.7	62.5	55.3	51.5	45.6	58.8	62.0
Mississippi	407.1	401.2	388.4	384.9	356.7	359.8	374.1	356.7	325.6	360.2	354.7	342.4	312.5
Montana	266.7	250.9	248.9	271.3	251.6	274.1	281.6	308.0	345.1	275.8	241.5	228.2	241.2
Nebraska	86.2	100.4	93.8	83.6	71.1	70.7	57.1	63.2	55.3	46.8	40.9	36.1	30.6
New Mexico	1,083.7	1,090.2	1,064.6	1,010.7	956.8	895.2	1,024.6	925.8	864.5	839.9	760.9	656.9	582.6
New York	32.4	27.7	23.1	18.4	13.6	11.9	10.2	14.6	13.0	11.8	10.6	9.8	9.2
North Dakota	430.5	413.1	403.5	389.2	377.2	395.1	321.3	290.3	287.4	234.5	192.4	174.0	166.0
Ohio	74.7	75.8	77.3	87.8	99.6	100.9	101.2	114.2	132.3	127.4	127.9	129.1	127.4
Oklahoma	1,790.5	1,787.5	1,728.3	1,628.1	1,585.9	1,517.5	1,518.2	1,458.9	1,394.7	1,390.0	1,351.4	1,404.6	1,303.0
Pennsylvania	107.6	102.0	96.7	91.7	86.6	76.8	72.4	63.3	59.2	54.7	51.3	47.1	37.3
South Dakota	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	14,758.5	14,849.6	14,648.3	14,573.1	14,299.8	14,303.1	14,077.1	14,494.1	13,809.9	13,063.2	13,195.5	13,023.5	12,144.1
Utah	208.5	218.1	197.7	219.6	219.5	196.9	213.4	201.0	180.0	195.3	181.5	165.8	244.4
West Virginia	51.4	50.9	56.2	57.3	58.7	55.2	56.6	56.2	53.6	53.5	53.2	51.7	34.0
Wyoming	1,427.4	1,380.5	1,297.0	1,254.3	1,204.5	1,168.9	1,072.5	1,043.5	1,101.3	996.6	1,017.4	997.0	949.8
Miscellaneous	32.3	89.7	90.5	82.5	11.9	17.9	15.3	20.9	20.8	18.9	83.2	7.3	6.5
TOTAL U.S.(2)	31,613.2	31,758.5	31,389.2	30,970.0	30,990.5	31,352.4	31,452.1	31,376.7	30,707.1	29,631.9	39,001.3	38,063.0	36,339.4

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annual Reports.

Section II
Table 3b

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Alabama	53.6	68.7	61.0	53.3	85.0	74.0	45.0	54.0	55.0	54.0	51.0	68.0	69.0
Alaska	10,112.2	10,094.1	10,037.3	9,785.7	8,413.0	9,384.0	8,875.0	8,751.0	8,283.0	7,406.0	7,307.0	7,563.0	7,056.0
Arkansas	105.6	106.3	95.7	93.4	116.0	111.0	107.0	107.0	113.0	107.0	120.0	114.0	97.0
California	3,488.1	3,557.0	3,647.5	3,589.9	5,005.0	4,974.0	5,265.0	5,470.0	5,441.0	5,405.0	5,348.0	5,707.0	5,801.0
Colorado	304.8	289.3	276.1	251.8	230.0	194.0	159.0	183.0	147.0	169.5	186.0	198.0	198.0
Florida	183.9	302.7	262.5	249.6	213.0	168.0	128.0	134.0	109.0	97.0	78.0	82.0	77.0
Illinois	152.3	159.8	161.0	155.3	150.0	158.0	136.0	113.0	129.0	150.0	135.0	153.0	136.0
Indiana	26.6	24.4	22.0	22.3	20.0	29.0	40.0	23.0	21.0	28.0	34.0	33.0	35.0
Kansas	401.1	395.1	364.4	361.6	349.0	303.0	377.0	310.0	371.0	378.0	344.0	377.0	423.0
Kentucky	40.0	36.6	39.3	38.2	30.0	40.0	25.0	35.0	29.0	36.0	35.0	41.0	42.0
Louisiana	4,576.8	4,226.5	3,827.2	3,470.6	3,600.0	3,448.0	2,780.0	2,751.0	2,985.0	2,728.0	2,707.0	2,661.0	2,642.0
Michigan	72.4	82.3	93.3	138.8	213.0	220.0	159.0	205.0	240.0	184.0	209.0	180.0	191.0
Mississippi	291.0	261.4	231.2	214.2	241.0	250.0	238.0	202.0	209.0	223.0	205.0	201.0	184.0
Montana	219.3	207.4	164.0	152.7	175.0	158.0	152.0	179.0	186.0	216.0	234.0	224.0	232.0
Nebraska	28.2	26.8	28.4	31.3	22.0	30.0	25.0	46.0	41.0	32.0	44.0	46.0	42.0
New Mexico	643.0	625.0	588.1	535.5	605.0	579.0	563.0	547.0	555.0	563.0	576.0	660.0	688.0
New York	8.3	10.9	10.0	9.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Dakota	179.5	172.8	158.2	149.6	155.0	162.0	211.0	214.0	223.0	237.0	258.0	260.0	255.0
Ohio	124.9	123.9	121.3	125.3	74.0	69.0	82.0	116.0	112.0	111.0	130.0	116.0	79.0
Oklahoma	1,271.0	1,232.4	1,239.7	1,186.6	1,109.0	979.0	1,014.0	930.0	950.0	971.0	931.0	940.0	935.0
Pennsylvania	39.6	50.4	48.0	50.6	57.0	27.0	33.0	35.0	32.0	37.0	41.0	40.0	38.0
South Dakota	(1)	(1)	1.9	1.5	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	1.5	1.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	11,756.6	11,001.5	10,080.0	9,226.3	9,751.0	8,911.0	8,248.0	8,206.0	8,093.0	7,616.0	7,539.0	7,557.0	7,894.0
Utah	264.5	250.6	208.3	183.2	252.0	188.0	201.0	198.0	190.0	173.0	187.0	172.0	276.0
West Virginia	32.1	32.2	31.4	30.0	21.0	30.0	48.0	30.0	30.0	48.0	49.0	76.0	40.0
Wyoming	916.8	903.4	877.4	827.8	851.0	845.0	841.0	928.0	840.0	856.0	957.0	954.0	951.0
Miscellaneous	7.6	8.5	5.4	6.2	23.0	24.0	22.0	38.0	40.0	33.0	30.0	23.0	35.0
TOTAL U.S.(2)	35,299.8	34,250.0	32,682.1	30,942.2	31,780.0	31,355.0	29,810.0	29,805.0	29,426.0	27,858.0	27,735.0	28,446.0	28,416.0

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Sources: 1947-1976: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annuals.
1977-1985: DOE/EIA--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

Section II
Table 3c

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1986	1987
Alabama	55.0	55.0
Alaska	6,875.0	7,378.0
Arkansas	88.0	82.0
California	4,734.0	4,709.0
Colorado	207.0	292.0
Florida	67.0	61.0
Illinois	135.0	153.0
Indiana	32.0	23.0
Kansas	312.0	357.0
Kentucky	31.0	25.0
Louisiana	826.0	807.0
Michigan	146.0	151.0
Mississippi	199.0	202.0
Montana	248.0	246.0
Nebraska	45.0	33.0
New Mexico	644.0	654.0
New York	(1)	(1)
North Dakota	218.0	215.0
Ohio	72.0	66.0
Oklahoma	874.0	788.0
Pennsylvania	26.0	26.0
South Dakota	(1)	(1)
Tennessee	(1)	(1)
Texas	7,152.0	7,112.0
Utah	269.0	284.0
West Virginia	37.0	34.0
Wyoming	849.0	854.0
Miscellaneous	33.0	30.0
TOTAL U.S.(2)	26,889.0(3)	27,256.0(3)

(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.
(3) 1986 includes 2,715 from federal offshore waters, 1987 = 2,639.

Source: D.O.E./E.I.A.--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

Section II
Table 4

ESTIMATED PROVED WORLD RESERVES OF CRUDE OIL (ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1975	Nation	1976	Nation	1977
1. Saudi Arabia(1)	164,500,000	1. Saudi Arabia(1)	148,600,000	1. Saudi Arabia(1)	151,400,000
2. U.S.S.R.	83,400,000	2. U.S.S.R.	80,400,000	2. U.S.S.R.	78,100,000
3. Kuwait(1)	72,800,000	3. Kuwait(1)	68,000,000	3. Kuwait(1)	67,400,000
4. Iran	66,000,000	4. Iran	64,500,000	4. Iran	63,000,000
5. Iraq	35,000,000	5. Iraq	34,300,000	5. Iraq	34,000,000
6. United States	34,249,956	6. United States	32,682,127	6. United Arab Emirates	31,200,000
7. United Arab Emirates	33,920,000	7. United Arab Emirates	32,200,000	7. United States	30,942,166
8. Libya	26,600,000	8. Libya	26,100,000	8. Libya	25,500,000
9. People's Republic of China	25,000,000	9. Nigeria	20,200,000	9. People's Republic of China	20,000,000
10. Nigeria	20,900,000	10. People's Republic of China	20,000,000	10. Nigeria	19,500,000
11. United Kingdom	15,700,000	11. Venezuela	17,700,000	11. United Kingdom	16,800,000
12. Venezuela	15,000,000	12. United Kingdom	16,000,000	12. Venezuela	15,270,000
13. Indonesia	15,000,000	13. Indonesia	14,000,000	13. Indonesia	10,500,000
14. Mexico	13,582,000	14. Mexico	9,500,000	14. Mexico	7,000,000
15. Algeria	7,700,000	15. Algeria	7,370,000	15. Algeria	6,800,000
16. Norway	7,300,000	16. Norway	7,000,000	16. Canada	6,257,082
17. Canada	7,171,229	17. Canada	6,653,002	17. Oman	5,800,000
18. Oman	6,000,000	18. Oman	5,900,000	18. Qatar	5,700,000
19. Qatar	6,000,000	19. Qatar	5,850,000	19. Norway	5,660,000
20. Congo Republic	4,874,000	20. Egypt	3,900,000	20. India	3,000,000
TOTAL FREE WORLD	601,018,535	TOTAL FREE WORLD	554,920,849	TOTAL FREE WORLD	538,989,568
TOTAL WORLD	712,418,535	TOTAL WORLD	657,920,849	TOTAL WORLD	640,089,568

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 17.3 billion barrels in 1975, 6.4 billion barrels in 1976, and 6.3 billion barrels in 1977. This production is not included in the above figures.

Source: United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
Canada, Canadian Petroleum Association
Other Nations, Oil and Gas Journal, Worldwide Report

Section II
Table 4a

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES-TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1978	Nation	1979	Nation	1980
1. Saudi Arabia(1)	150,000,000	1. Saudi Arabia(1)	165,700,000	1. Saudi Arabia(1)	163,350,000
2. U.S.S.R.	75,000,000	2. U.S.S.R.	71,000,000	2. U.S.S.R.	67,000,000
3. Kuwait(1)	67,000,000	3. Kuwait(1)	66,200,000	3. Kuwait(1)	65,400,000
4. Iran	62,000,000	4. Iran	59,000,000	4. Iran	58,000,000
5. Iraq	34,500,000	5. Iraq	32,100,000	5. Mexico	31,250,000
6. United Arab Emirates	32,425,000	6. Abu Dhabi	30,000,000	6. Iraq	31,000,000
7. United States	29,486,402	7. United States	27,803,760	7. Abu Dhabi	28,000,000
8. Libya	25,000,000	8. Libya	24,300,000	8. United States	27,051,289
9. People's Republic of China	20,000,000	9. People's Republic of China	20,000,000	9. Libya	23,500,000
10. United Kingdom	19,000,000	10. Nigeria	18,200,000	10. People's Republic of China	20,000,000
11. Nigeria	18,700,000	11. Venezuela	18,000,000	11. Venezuela	17,870,000
12. Venezuela	18,200,000	12. Mexico	16,000,000	12. Nigeria	17,400,000
13. Mexico	14,000,000	13. United Kingdom	16,000,000	13. United Kingdom	15,400,000
14. Indonesia	10,000,000	14. Indonesia	10,200,000	14. Indonesia	9,600,000
15. Algeria	6,600,000	15. Canada	6,860,000	15. Algeria	8,440,000
16. Norway	6,000,000	16. Algeria	6,300,000	16. Canada	6,800,000
17. Canada	5,970,872	17. Norway	5,900,000	17. Norway	5,750,000
18. Oman	5,650,000	18. Qatar	4,000,000	18. Qatar	3,760,000
19. Qatar	5,600,000	19. Egypt	3,200,000	19. Egypt	3,100,000
20. India	3,000,000	20. India	2,900,000	20. Malaysia	2,800,000
TOTAL FREE WORLD	547,805,194	TOTAL FREE WORLD	547,771,585	TOTAL FREE WORLD	552,174,789
TOTAL WORLD	645,805,194	TOTAL WORLD	641,771,585	TOTAL WORLD	642,174,789

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 6.2 billion barrels in 1978, 6.5 billion barrels in 1979, and 6.3 billion barrels in 1980. These figures are not included in the above figures.

Source: United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
Canada, Canadian Petroleum Association
Other Nations, Oil and Gas Journal, Worldwide Report

(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1981	Nation	1982	Nation	1983
1. Saudi Arabia(1)	165,000,000	1. Saudi Arabia(1)	164,600,000	1. Saudi Arabia(1)	162,400,000
2. Kuwait(1)	64,900,000	3. Kuwait(1)	64,480,000	3. Kuwait(1)	64,230,000
3. U.S.S.R.	63,000,000	2. U.S.S.R.	63,000,000	2. U.S.S.R.	63,000,000
4. Iran	57,500,000	4. Iran	57,000,000	4. Iran	55,308,000
5. Mexico	44,000,000	5. Mexico	56,990,000	5. Mexico	48,300,000
6. Iraq	30,000,000	6. Abu Dhabi	30,600,000	6. Iraq	41,000,000
7. Abu Dhabi	29,000,000	7. United States	29,426,000	7. Abu Dhabi	30,510,000
8. United States	29,805,000	8. Iraq	29,700,000	8. United States	27,858,000
9. Libya	23,000,000	9. Libya	22,600,000	9. Libya	21,500,000
10. China	20,500,000	10. Venezuela	20,300,000	10. Venezuela	21,500,000
11. Venezuela	17,950,000	11. China	19,895,000	11. China	19,485,000
12. Nigeria	16,700,000	12. Nigeria	16,500,000	12. Nigeria	16,750,000
13. United Kingdom	14,800,000	13. United Kingdom	14,800,000	13. United Kingdom	13,900,000
14. Indonesia	9,500,000	14. Indonesia	9,800,000	14. Indonesia	9,550,000
15. Algeria	8,200,000	15. Algeria	8,080,000	15. Algeria	9,440,000
16. Canada	6,400,000	16. Norway	7,620,000	16. Canada	7,020,000
17. Norway	5,500,000	17. Canada	7,300,000	17. Norway	6,800,000
18. Qatar	3,585,000	18. Qatar	3,434,000	18. Qatar	3,425,000
19. Malaysia	3,000,000	19. Egypt	2,930,000	19. Malaysia	3,325,000
20. Egypt(2)	2,900,000	20. Malaysia	2,800,000	20. Egypt	3,325,000
TOTAL FREE WORLD	565,629,712	TOTAL FREE WORLD	585,505,150	TOTAL FREE WORLD	583,147,406
TOTAL WORLD	651,929,712	TOTAL WORLD	670,350,150	TOTAL WORLD	668,262,406

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 6,260 mb in 1981, 6,500 mb in 1982, and 5,840 mb in 1983. This production is not included in the above figures.

Source: United States, U.S. Energy Information Administration
Rest of World, Oil and Gas Journal

Section II
Table 4c

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES-TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

	Nation	1984		Nation	1985		Nation	1986
1.	Saudi Arabia(1)	166,000,000	1.	Saudi Arabia(1)	169,000,000	1.	Saudi Arabia(1)	168,800,000
2.	Kuwait(1)	63,900,000	2.	Kuwait(1)	90,000,000	2.	Kuwait(1)	89,774,000
3.	U.S.S.R.	63,000,000	3.	U.S.S.R.	63,000,000	3.	U.S.S.R.	61,000,000
4.	Iran	51,000,000	4.	Mexico	48,600,000	4.	Mexico	49,300,000
5.	Mexico	48,000,000	5.	Iran	48,500,000	5.	Iran	47,876,000
6.	Iraq	43,000,000	6.	Iraq	44,500,000	6.	Iraq	44,110,000
7.	Abu Dhabi	30,400,000	7.	Abu Dhabi	30,500,000	7.	Abu Dhabi	31,000,000
8.	United States	27,735,000	8.	United States	28,446,000	8.	United States	28,416,000
9.	Venezuela	24,850,000	9.	Venezuela	25,845,000	9.	Venezuela	25,591,000
10.	Libya	21,270,000	10.	Libya	21,100,000	10.	Libya	21,300,000
11.	China	19,100,000	11.	China	19,100,000	11.	China	18,420,000
12.	Nigeria	16,550,000	12.	Nigeria	16,650,000	12.	Nigeria	16,600,000
13.	United Kingdom	13,150,000	13.	United Kingdom	13,590,000	13.	United Kingdom	13,000,000
14.	Algeria	9,220,000	14.	Algeria	9,000,000	14.	Norway	10,900,000
15.	Indonesia	9,100,000	15.	Indonesia	8,650,000	15.	Algeria	8,820,000
16.	Norway	7,660,000	16.	Norway	8,300,000	16.	Indonesia	8,500,000
17.	Canada	6,730,000	17.	Canada	7,075,000	17.	Canada	6,500,000
18.	India	3,485,000	18.	Oman	3,500,000	18.	Oman	4,000,000
19.	Egypt	3,450,000	19.	India	3,500,000	19.	Egypt	3,850,000
20.	Qatar	3,330,000	20.	Qatar	3,350,000	20.	India	3,736,000
	TOTAL FREE WORLD	585,137,600		TOTAL FREE WORLD	615,713,400		TOTAL FREE WORLD	619,196,560
	TOTAL WORLD	669,737,600		TOTAL WORLD	699,813,400		TOTAL WORLD	700,566,560

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 5,695 MB in 1984, 5,420 MB in 1985, and 5,380 in 1986. These data are not included in the above figures.

Source: United States--U.S. Energy Information Administration, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual Report
Rest of World--Oil and Gas Journal, "Worldwide Report" issue

Section II
Table 4d

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES--TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of Barrels)

	Nation	1987		Nation	1988		Nation	1989
1.	Saudi Arabia	166,573,900	1.	Saudi Arabia	166,980,000	1.	Saudi Arabia	169,970,000
2.	Kuwait	91,916,000	2.	Iraq	100,000,000	2.	Iraq	100,000,000
3.	U.S.S.R.	59,000,000	3.	Iran	92,850,000	3.	Iran	92,850,000
4.	Mexico	54,653,000	4.	Abu Dhabi	92,205,000	4.	Abu Dhabi	92,205,000
5.	Iran	48,800,000	5.	Kuwait	91,920,000	5.	Kuwait	91,920,000
6.	Iraq	47,100,000	6.	U.S.S.R.	59,000,000	6.	U.S.S.R.	58,500,000
7.	Abu Dhabi	31,000,000	7.	Venezuela	56,300,000	7.	Venezuela	58,083,900
8.	United States	26,889,000	8.	Mexico	48,610,000	8.	Mexico	54,110,000
9.	Venezuela	25,000,000	9.	United States	27,256,000	9.	United States	26,500,000
10.	Libya	21,300,000	10.	Libya	21,000,000	10.	China	23,500,000
11.	China	18,400,000	11.	China	18,400,000	11.	Libya	22,000,000
12.	Nigeria	16,000,000	12.	Nigeria	15,980,000	12.	Nigeria	16,000,000
13.	Norway	10,500,000	13.	Norway	14,800,000	13.	Norway	10,435,000
14.	United Kingdom	9,000,000	14.	Algeria	8,500,000	14.	Algeria	8,400,000
15.	Algeria	8,800,000	15.	Indonesia	8,400,000	15.	Indonesia	8,250,000
16.	Indonesia	8,300,000	16.	Canada	6,825,000	16.	Canada	6,785,514
17.	Canada	6,850,000	17.	United Kingdom	5,200,000	17.	India	6,354,200
18.	India	4,202,000	18.	Egypt	4,300,000	18.	United Kingdom	5,175,000
19.	Oman	4,032,000	19.	India	4,250,000	19.	Egypt	4,300,000
20.	Egypt	3,600,000	20.	Oman	4,012,000	20.	Oman	4,071,160
	TOTAL FREE WORLD	620,528,600		TOTAL FREE WORLD	810,144,500		TOTAL FREE WORLD	823,642,751
	TOTAL WORLD	699,778,600		TOTAL WORLD	889,344,500		TOTAL WORLD	907,442,751

Source: U.S.--D.O.E./E.I.A., U.S. Crude Oil, Natural Gas Liquids and Natural Gas Reserves.
Rest of World--Oil and Gas Journal, "Worldwide Report" issue.

USGS ESTIMATES OF U.S. OIL AND GAS RESOURCES

Petroleum Region	CRUDE OIL (billion barrels)							NATURAL GAS (trillion cubic feet)					
	Identified resources			Undiscovered recoverable resources				Identified resources		Undiscovered recoverable resources			
	Measured reserves	Indicated reserves	Inferred reserves	Low 1F95	High 1F5	Mean	Standard deviation	Measured reserves	Inferred reserves	Low(3) 1F95	High 1F5	Mean	Standard deviation
Onshore													
1. Alaska	8.7	0	5.0	2.5	14.6	6.9	4.3	30.0	4.4	19.8	62.3	36.6	14.0
2. Pacific Coast	3.2	1.6	1.2	2.1	7.9	4.4	2.0	4.2	3.8	8.2	24.9	14.7	5.5
3. Colorado Plateau an Basin and Range	0.3	Negl.	1.0	6.9	25.9	14.2	8.0	11.4	4.5	53.5	142.4	90.1	29.7
4. Rocky Mountains and northern Great Plas	1.1	0.2	2.9	6.0	14.0	9.4	2.6	7.1	5.5	29.6	69.0	45.7	12.6
5. West Texas and eastern New Mexico	5.4	1.3	4.0	2.7	9.4	5.4	2.2	15.9	18.1	22.4	75.2	42.8	17.8
6. Gulf Coast	3.8	0.2	5.3	3.6	12.6	7.1	2.8	45.3	74.3	56.5	249.1	124.4	63.6
7. Mid-continent	1.5	0.2	1.4	2.3	7.7	4.4	1.8	32.0	18.8	22.9	80.8	44.5	18.4
8. Michigan Basin	0.2	Negl.	0.8	0.3	2.7	1.1	0.8	1.1	1.1	1.8	10.9	5.1	3.1
9. Eastern Interior	0.2	Negl.	0.1	0.3	1.9	0.9	0.6	Negl.	0.1	1.2	5.0	2.7	1.3
10. Appalachians	0.2	Negl.	0.1	0.1	1.5	0.6-	0.5	6.2	5.9	6.4	45.8	20.1	13.2
11. Atlantic Coast	Negl.	0	0.1	0.1	0.8	0.3	0.3	Negl.	Negl.	Negl.	0.4	0.1	0.3
Entire onshore	24.7	3.6	21.8	41.7	71.0	54.6	10.5	153.3	136.5	322.5	567.9	426.8	78.5
Offshore-Shelf													
1A Alaska2	0.2	0	0.1	3.8	22.0	10.8	6.4	2.0	1.2	28.5	99.0	57.4	23.6
2A Pacific Coast	1.2	0	0.5	0.6	3.0	1.5	0.8	1.9	0.4	0.9	5.2	2.5	1.5
6A Gulf of Mexico	1.7	Negl.	1.0	1.3	7.9	4.0	2.1	34.4	39.5	22.0	79.2	45.3	18.5
11A Atlantic Coast	0	0	0	0	3.9	1.3	1.4	0	0	2.2	17.9	8.2	5.0
Entire shelf	3.1	Negl.	1.5	9.2	30.2	17.6	6.9	38.2	41.0	72.0	166.8	113.4	30.4
Offshore-Slope													
1A Alaska2	0	0	0	0	52.0	1.4	2.3	0	0	0	20.2	7.2	12.3
2A Pacific Coast	0	0	0	0.6	6.0	2.4	2.0	0	0	1.9	10.2	4.4	3.0
6A Gulf of Mexico	No data	0	No data	0.9	5.2	2.5	1.4	No data	No data	11.1	51.8	26.5	13.8
11A Atlantic Coast	0	0	0	0	10.7	4.1	3.6	0	0	5.1	34.5	15.4	9.6
Entire slope	0	0	0	4.2	19.2	10.4	4.9	0	0	28.6	87.1	53.6	21.0
Offshore-combined shelf and slope													
1A Alaska2	0.2	0	0.1	4.6	24.2	12.2	6.8	2.0	1.2	33.3	109.6	64.6	26.6
2A Pacific Coast	1.2	0	0.5	1.7	7.9	3.8	2.2	1.9	0.4	3.7	13.6	6.9	3.3
6A Gulf of Mexico	1.7	Negl.	1.0	3.1	11.1	6.5	2.5	34.4	39.5	41.7	114.2	71.8	23.1
11A Atlantic Coast	0	0	0	1.1	12.9	5.4	3.9	0	0	9.2	42.8	23.7	10.8
Entire slope	3.1	Negl.	1.5	16.9	43.5	28.0	8.5	38.2	41.0	117.4	230.6	167.0	37.0
Combined onshore and offshore													
Entire United States	27.8	3.6	23.4	64.3	105.1	82.6	13.4	191.5	177.5	474.6	739.3	593.8	86.8

(1) F95 denotes the 95th fractile; the probability of more than the amount F95 is 95% F5 is defined similarly.
(2) Includes quantities considered recoverable only if technology permits their ploitation beneath Artic pack ice--a condition not yet met.
(3) Does not include gas in storage.

Source: U.S. Geological Survey, Circular 860

SECTION III. EXPLORATION AND DRILLING

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U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1947	275	1,434,351	119	662,513	3,086	12,509,723	3,480	14,606,587	11.3
1948	366	1,791,437	135	899,514	3,795	16,048,313	4,296	18,739,264	11.7
1949	364	1,813,650	142	973,124	3,943	15,372,983	4,449	18,159,757	11.4
1950	462	2,345,714	130	800,276	4,698	18,972,164	5,290	22,118,254	11.2
1951	515	2,784,458	169	1,046,805	5,505	24,116,951	6,189	27,948,214	11.1
1952	556	3,122,962	185	1,310,227	5,957	28,068,745	6,698	32,501,934	11.1
1953	581	3,288,855	193	1,244,946	6,151	29,321,262	6,925	33,855,063	11.2
1954	639	3,577,418	263	1,761,483	6,478	30,149,120	7,380	35,488,021	12.2
1955	659	3,667,073	260	1,664,789	7,186	33,654,112	8,105	38,985,974	11.3
1956	628	3,690,270	240	1,762,688	7,874	36,913,273	8,742	42,366,231	9.9
1957	590	3,403,283	282	2,099,922	7,142	33,600,397	8,014	39,103,602	10.9
1958	518	2,963,220	268	2,077,923	6,164	29,161,083	6,950	34,202,226	11.3
1959	466	2,710,157	306	2,113,934	6,259	30,635,114	7,031	35,459,205	11.0
1960	448	2,614,001	297	2,136,721	6,575	31,130,339	7,320	35,881,061	10.2

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1947	982	4,280,672	396	1,895,491	5,397	20,217,185	6,775	26,393,348	20.3
1948	1,098	4,883,179	365	2,306,271	6,550	25,561,647	8,013	32,751,097	18.3
1949	1,406	5,950,460	424	2,409,230	7,228	26,438,601	9,058	34,798,291	20.2
1950	1,583	6,861,758	431	2,356,021	8,292	30,957,394	10,306	40,175,173	19.5
1951	1,763	8,125,473	454	2,495,592	9,539	38,722,629	11,756	49,343,694	18.9
1952	1,776	8,490,701	559	3,393,813	10,090	43,730,875	12,425	55,615,389	18.8
1953	1,981	9,431,700	699	3,952,118	10,633	47,279,793	13,313	60,663,611	20.1
1954	1,985	9,409,404	726	4,399,196	10,389	45,791,944	13,100	59,600,544	20.7
1955	2,236	10,774,397	874	5,212,258	11,832	53,219,667	14,942	69,206,322	20.8
1956	2,267	11,110,534	822	5,179,111	13,118	58,047,439	16,207	74,337,084	19.1
1957	1,945	9,794,182	865	5,966,961	11,904	53,420,086	14,714	69,181,229	19.1
1958	1,745	8,712,007	822	5,472,151	10,632	47,299,753	13,199	61,483,911	19.4
1959	1,702	8,544,972	912	6,031,180	10,577	48,676,369	13,191	63,252,521	19.8
1960	1,321	6,829,122	868	5,466,439	9,515	43,535,075	11,704	55,830,636	18.7

Source: American Association of Petroleum Geologists.

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1961	429	2,304,472	316	2,373,465	6,164	30,733,007	6,909	35,410,944	10.8
1962	470	2,670,875	317	2,380,930	6,007	29,832,533	6,794	34,884,338	11.6
1963	529	2,629,952	240	1,550,207	5,801	29,371,086	6,570	33,551,245	11.7
1964	440	2,623,873	252	1,933,484	5,931	30,028,416	6,623	34,585,773	10.4
1965	397	2,279,545	234	1,849,272	5,544	27,933,474	6,175	32,062,291	10.2
1966	403	2,437,921	232	1,888,322	5,523	27,052,375	6,158	31,378,618	10.3
1967	371	2,255,638	189	1,496,083	4,700	24,255,198	5,260	28,006,919	10.6
1968	321	2,012,067	127	1,046,358	4,757	27,190,387	5,205	30,248,812	8.6
1969	344	2,237,551	191	1,669,263	5,421	31,511,973	5,956	35,418,787	9.0
1970(1)	292	1,952,666	189	1,607,386	4,348	25,412,904	4,829	28,972,956	10.0
1971	246	1,616,540	229	1,716,792	4,161	24,366,037	4,636	27,699,369	10.2
1972	287	1,861,279	270	2,056,516	4,454	26,780,915	5,011	30,698,710	11.1
1973	299	1,874,576	451	3,111,795	4,346	25,631,606	5,096	30,617,977	14.7
1974	396	2,447,814	466	3,172,478	5,084	29,289,318	5,946	34,909,610	17.0
1975	437	2,918,538	486	3,593,502	5,315	31,198,873	6,234	37,710,913	14.8

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1961	1,157	5,899,555	813	5,249,616	9,022	38,054,853	10,992	49,204,024	17.9
1962	1,211	6,205,402	771	5,187,452	8,815	44,103,834	10,797	55,496,688	18.4
1963	1,314	6,409,095	664	4,229,802	8,686	42,846,565	10,664	53,485,462	18.5
1964	1,219	6,715,355	577	4,203,534	8,951	42,655,665	10,747	53,574,554	16.7
1965	946	5,365,758	515	3,757,004	8,005	45,319,365	9,466	54,442,127	15.4
1966	1,030	5,880,029	578	4,881,198	8,705	44,461,934	10,313	55,223,161	15.6
1967	986	5,677,675	532	3,978,526	7,360	38,182,439	8,878	47,838,640	17.1
1968	954	5,642,235	486	3,740,781	7,439	41,575,022	8,879	50,958,038	16.2
1969	1,084	6,563,032	616	4,984,622	8,001	45,918,308	9,701	57,465,962	17.5
1970(1)	763	4,729,423	478	3,666,020	6,195	35,135,039	7,436	43,530,482	16.7
1971	664	3,785,858	472	3,612,832	5,995	34,563,763	7,131	41,962,453	15.9
1972	690	4,042,124	659	4,872,314	6,202	36,364,835	7,551	45,279,273	17.9
1973	654	4,046,218	1,079	7,074,241	6,038	34,928,875	7,771	46,049,334	22.3
1974	870	5,068,782	1,205	7,741,846	6,894	38,861,593	8,969	51,672,221	23.1
1975	991	5,822,068	1,261	8,468,203	7,207	40,755,363	9,459	55,045,634	23.8

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(1) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed regardless of the time frame in which they were reported to API.

Source: 1961-1966 -- American Association of Petroleum Geologists.
1967-1975 -- American Petroleum Institute.

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1976	458	3,013,230	527	3,786,300	4,871	28,898,393	5,856	35,697,923	16.8
1977	458	2,839,680	534	3,868,753	5,170	30,636,898	6,162	37,345,331	16.1
1978	484	3,164,038	644	4,297,038	5,603	34,550,903	6,731	42,011,979	16.8
1979	532	3,468,220	688	4,947,501	5,203	31,941,489	6,423	40,357,210	19.0
1980	664	4,310,733	695	4,764,991	5,973	36,802,580	7,332	45,878,304	18.5
1981	868	6,030,600	720	5,593,603	7,563	47,904,317	9,151	59,528,520	17.4
1982	707	4,613,633	618	4,575,677	6,061	37,840,415	7,386	47,029,725	17.9
1983	508	3,169,330	486	3,101,355	5,063	29,167,196	6,057	35,437,881	16.4
1984	554	3,806,830	429	2,877,818	5,545	34,525,367	6,528	41,210,015	15.1
1985	414	2,890,672	358	2,618,903	4,858	31,087,959	5,630	36,597,534	13.7
1986	270	1,751,349	218	1,446,276	2,996	18,551,934	3,484	21,749,559	14.0
1987	277	1,758,190	218	1,414,726	2,930	17,018,112	3,425	120,191,028	14.5
1988	218	1,386,419	175	1,174,660	2,570	16,309,006	2,963	18,870,085	13.3

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1976	1,100	6,493,760	1,361	9,187,178	6,856	38,211,252	9,317	53,892,190	26.4
1977	1,181	6,870,706	1,557	10,204,224	7,402	41,136,466	10,140	58,211,396	27.0
1978	1,189	7,098,457	1,786	11,780,690	8,055	46,616,063	11,030	65,495,210	27.0
1979	1,335	7,991,579	1,921	12,634,380	7,479	42,736,704	10,735	63,362,663	30.3
1980	1,777	10,109,549	2,085	13,710,438	9,008	49,992,439	12,870	73,812,426	30.0
1981	2,661	15,418,060	2,522	16,996,454	12,247	68,653,990	17,430	101,068,504	29.7
1982(1)	2,481	13,415,348	2,172	14,713,785	11,229	60,301,560	15,882	88,430,693	29.3
1983	2,129	10,544,047	1,654	10,235,772	10,062	48,472,448	13,845	69,252,267	27.3
1984	2,334	12,621,000	1,588	9,943,000	11,216	58,759,000	15,138	81,323,000	25.9
1985	1,724	10,068,000	1,283	8,694,000	9,201	49,571,000	12,208	68,333,000	24.6
1986	993	5,990,000	749	5,082,000	5,414	29,973,000	7,156	41,045,000	24.3
1987	895	5,320,000	692	4,582,000	5,128	27,447,000	6,715	37,349,000	23.6
1988	824	5,001,000	646	4,359,000	4,670	27,137,000	6,140	36,497,000	23.9

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(1) Data beginning with 1982 are for estimated completions rather than reported completions. Therefore, these figures do not correspond to those on Table 15d (state data), which represent reported completions.

Source: 1976-1981, API, Well Completions and Footage Drilled in the United States, 1970-1982.
1982-present, API, Quarterly Completions Reports.

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells(1)

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total	Footage
1947	17,017		2,909		4,141		24,067	87,667,652
1948	21,487		2,532		5,476		29,495	104,640,903
1949	20,636		2,463		5,499		28,598	103,204,709
1950	22,847		2,412		6,465		31,724	119,112,827
1951	21,690		2,576		7,114		31,380	122,987,306
1952	21,690		2,696		7,528		31,914	131,574,611
1953	23,781		3,107		7,816		34,704	138,175,389
1954	27,788		3,251		8,779		39,818	159,385,456
1955	29,331		2,739		8,910		40,980	157,063,678
1956	28,463		3,721		8,720		40,904	161,564,916
1957	26,067		3,755		9,079		38,901	152,719,310
1958	22,833		3,981		8,411		35,225	136,740,181
1959	24,098		4,117		8,688		36,903	145,978,895
1960	19,865		4,390		8,059		32,314	134,872,036

Total Wells

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total Wells	Footage	Service Strat & Core	Grand Total
1947	17,999		3,305		9,538		30,842	114,061,000	2,280	33,122
1948	22,585		2,897		12,026		37,508	137,392,000	2,270	39,778
1949	22,042		2,887		12,727		37,656	138,003,000	1,382	39,038
1950	24,430		2,843		14,757		42,030	159,288,000	1,249	43,279
1951	23,453		3,030		16,653		43,136	172,331,000	1,380	44,516
1952	23,466		3,255		17,618		44,339	187,190,000	1,482	45,821
1953	25,762		3,806		18,449		48,017	198,839,000	1,262	49,279
1954	29,773		3,974		19,168		52,915	218,986,000	1,012	53,927
1955	31,567		3,608		20,742		55,917	226,270,000	760	56,677
1956	30,737		4,543		21,797		57,077	233,902,000	1,049	58,126
1957	28,012		4,620		20,976		53,608	221,900,539	1,061	53,838
1958	24,578		4,803		19,043		48,424	198,224,092	1,615	50,039
1959	25,800		5,029		19,265		50,094	209,231,416	1,670	51,764
1960	21,186		5,258		17,574		44,018	190,702,672	2,733	46,751

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(1) The number of development wells was obtained by deducting the total number of exploratory wells reported by the AAPG from the total number of wells reported by the Oil and Gas Journal.
(2) Footage not available prior to 1966.

Source: American Association of Petroleum Geologists and Oil and Gas Journal.

Section III
Table 2a

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells(1)

	Oil wells	Footage(2)	Gas wells	Footage(2)	Dry Holes	Footage(2)	Total	Footage
1961	19,944		4,851		8,084		32,879	142,912,090
1962	20,038		5,077		7,867		32,982	143,061,953
1963	18,974		4,087		7,661		30,722	130,871,538
1964	19,401		4,278		8,537		32,216	136,347,316
1965	17,815		4,209		8,020		30,044	126,984,888
1966	15,417	59,562,661	3,589	19,562,196	7,065	28,097,191	26,071	107,222,048
1967	14,343	52,955,743	3,127	17,601,654	5,886	22,960,426	23,356	93,517,823
1968	13,377	53,874,620	2,970	16,975,492	5,373	23,162,297	21,720	94,012,409
1969	13,284	55,018,970	3,467	19,177,390	5,735	25,445,537	22,486	99,641,897
1970(3)	12,280	52,101,320	3,353	19,950,845	4,904	22,976,880	20,737	95,029,045
1971	11,239	45,271,862	3,511	19,807,020	4,387	20,214,617	19,137	85,293,499
1972	10,747	45,441,840	4,825	25,384,401	4,811	22,691,048	20,383	93,517,289
1973	9,597	40,712,974	5,896	31,137,367	4,428	21,525,063	19,921	93,375,404
1974	12,794	47,001,530	5,963	30,739,691	5,311	24,362,957	24,068	102,104,178
1975	15,988	61,103,799	6,908	36,012,511	6,529	28,878,049	29,425	125,994,359

Total Wells

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total Wells	Footage	Service Strat & Core	Grand Total
1961	21,101		5,664		17,106		43,871	192,116,114	3,091	46,962
1962	21,249		5,848		16,682		43,779	198,558,641	2,400	46,179
1963	20,288		4,751		16,347		41,386	184,357,000	2,267	43,653
1964	20,620		4,855		17,488		42,963	189,921,870	2,273	45,236
1965	18,761		4,724		16,025		39,501	181,427,015	1,922	41,423
1966	16,447	65,442,690	4,167	24,443,394	15,770	72,559,125	36,384	162,445,209	2,152	38,536
1967	15,329	58,633,418	3,659	21,580,180	13,246	61,142,865	32,234	141,356,463	1,584	33,818
1968	14,331	59,516,855	3,456	20,716,273	12,812	64,737,319	30,599	144,970,447	2,315	32,914
1969	14,368	61,582,002	4,083	24,162,012	13,736	71,363,845	32,187	157,107,859	1,866	34,053
1970(3)	13,043	56,830,743	4,031	23,616,865	11,099	58,111,919	28,173	138,559,527	1,369	29,542
1971	11,903	49,057,720	3,983	23,419,852	10,382	54,778,380	26,268	127,255,952	1,594	27,682
1972	11,437	49,483,964	5,484	30,256,715	11,013	59,055,883	27,934	138,796,562	1,486	29,420
1973	10,251	44,751,192	6,975	38,211,608	10,466	56,453,938	27,692	139,424,738	970	28,662
1974	13,664	52,070,312	7,168	38,481,537	12,205	63,224,550	33,037	153,776,399	1,378	34,415
1975	16,979	66,925,867	8,169	44,480,714	13,736	69,633,412	38,884	181,039,993	1,920	40,804

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(1) The number of development wells for 1961-1965 was obtained by deducting the total number of exploratory wells reported by the AAPG from the total number of wells reported by the Oil and Gas Journal.

(2) Footage not available prior to 1966.

(3) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed regardless of the time frame in which they were reported to API.

Source: 1961-1965 -- American Association of Petroleum Geologists and Oil and Gas Journal.
1966-1975 -- American Petroleum Institute.

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage
1976	16,597	62,333,936	8,077	40,010,511	6,949	31,052,949	31,623	133,397,396
1977	17,519	68,320,374	10,562	53,295,651	7,634	35,868,457	35,715	157,484,482
1978	17,876	69,522,882	12,619	63,809,274	8,536	39,558,882	39,031	172,891,038
1979	19,354	74,150,995	13,245	67,240,506	8,556	38,931,266	41,155	180,322,767
1980	30,343	113,154,164	15,047	76,641,633	11,226	47,836,614	56,616	237,632,411
1981	39,859	153,287,896	17,220	88,782,627	14,725	63,381,426	71,804	305,451,949
1982	36,771	134,817,629	16,638	90,474,536	14,598	61,660,061	68,007	286,952,226
1983	35,267	125,726,889	12,851	66,429,973	13,775	55,208,335	61,893	247,365,197
1984	42,138	155,025,000	13,374	71,706,000	14,333	60,742,000	69,845	287,473,000
1985	34,734	132,253,000	11,634	62,200,000	12,230	53,992,000	58,598	248,445,000
1986	17,605	68,614,000	7,306	37,776,000	6,948	30,206,000	31,859	136,596,000
1987	15,445	60,449,000	7,101	36,627,000	5,971	27,105,000	28,517	124,181,000
1988	12,233	50,734,000	7,591	38,430,000	5,204	25,336,000	25,028	114,500,000

Total Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total Wells	Footage	Service Strat & Core	Grand Total
1976	17,697	68,827,696	9,438	49,197,689	13,805	69,264,201	40,940	187,289,586	1,674	42,614
1977	18,700	75,191,080	12,119	63,499,875	15,036	77,004,923	45,855	215,695,878	1,453	47,308
1978	19,065	76,621,339	14,405	75,589,964	16,591	86,174,945	50,061	238,386,248	1,610	51,671
1979	20,689	82,142,574	15,166	79,874,886	16,035	81,667,970	51,890	243,685,430	1,472	53,362
1980	32,120	123,263,713	17,132	90,352,071	20,234	97,829,053	69,486	311,444,837	2,076	71,562
1981	42,520	168,705,956	19,742	105,779,081	26,972	132,035,416	89,234	406,520,453	2,366	91,600
1982(1)	39,252	148,232,977	18,810	105,188,321	25,827	121,961,621	83,889	375,382,919	2,212	86,101
1983	37,396	136,270,936	14,505	76,665,745	23,837	103,680,783	75,738	316,617,464	1,984	77,722
1984	44,472	167,646,000	14,962	81,649,000	25,549	119,501,000	84,983	368,796,000	2,190	87,173
1985	36,458	142,321,000	12,917	70,894,000	21,431	103,563,000	70,806	316,778,000	1,680	72,486
1986	18,598	74,604,000	8,055	42,858,000	12,362	60,179,000	39,015	177,641,000	769	39,784
1987	16,340	65,769,000	7,793	41,209,000	11,099	54,552,000	35,232	161,530,000	795	36,027
1988	13,057	55,735,000	8,237	42,789,000	9,874	52,473,000	31,168	150,997,000	688	31,856

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(1) Data beginning with 1982 are for estimated completions rather than reported completions. Therefore, these figures do not correspond to those on Table 15d (state data), which represent reported completions.

Source: 1976-1981, API, Well Completions and Footage Drilled in the United States, 1970-1982.
1982-present, API, Quarterly Completion Reports.

Section III
Table 3

U.S. WELLS DRILLED BY DEPTH INTERVAL

Year	Depth Interval (Feet) Under 5,000	5,000-9,999	10,000-14,999	15,000-19,999	20,000-over	Total Wells Drilled
1959	34,867	11,719	2,757	220	(1)	49,563
1960	30,575	10,485	2,835	238	(1)	44,133
1961	30,289	10,658	2,789	252	(1)	43,988
1962	29,496	11,103	3,062	283	(1)	43,944
1963	28,524	10,342	2,723	264	(1)	41,853
1964	29,913	10,649	2,604	320	(1)	43,486
1965	25,697	11,081	2,491	327	(1)	39,596
1966	22,178	9,703	2,251	355	34	34,521
1967	20,359	8,668	2,130	343	38	31,538
1968	17,999	8,958	2,264	308	47	29,576
1969	17,067	9,690	2,378	300	46	29,481
1970	16,941	8,644	2,142	361	85	28,173
1971	15,909	7,947	2,005	338	69	26,268
1972	16,736	8,441	2,226	470	61	27,934
1973	16,272	8,848	2,105	389	78	27,692
1974	20,822	9,617	2,178	339	81	33,037
1975	24,632	11,299	2,504	387	62	38,884
1976	26,257	11,592	2,707	330	54	40,940
1977	28,923	13,350	3,121	402	59	45,855
1978	31,717	14,103	3,610	569	62	50,061
1979	33,253	14,121	3,824	606	86	51,890
1980	46,320	18,083	4,270	716	77	69,486
1981	58,780	23,884	5,578	894	98	89,234
1982	55,190	20,457	5,586	1,147	137	82,517
1983	50,247	17,813	4,227	692	69	73,048
1984	55,100	22,072	5,127	661	46	83,006
1985	45,197	18,877	4,686	625	43	69,428
1986	24,348	10,669	2,813	381	30	38,241
1987	20,730	10,113	2,334	293	4	33,474
1988	13,891	8,166	2,123	310	8	24,498

Source: 1959-1969, API, Joint Association Survey.
1970-1981, API, Well Completions and Footage Drilled in the United States, 1970-1982.
1982-present, API, Quarterly Completion Reports.

Section III
Table 4

U.S. PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

Year	SEISMIC Company	SEISMIC Contractor	SEISMIC Total	GRAVITY-MAGNETIC-OTHER Company	GRAVITY-MAGNETIC-OTHER Contractor	GRAVITY-MAGNETIC-OTHER Total	ALL METHODS Company	ALL METHODS Contractor	ALL METHODS Total
1951	(1)	(1)	6,537	(1)	(1)	802	(1)	(1)	7,339
1952	(1)	(1)	7,958	(1)	(1)	965	(1)	(1)	8,923
1953	(1)	(1)	7,666	(1)	(1)	1,006	(1)	(1)	8,672
1954	(1)	(1)	6,863	(1)	(1)	1,106	(1)	(1)	7,969
1955	2,791	4,299	7,090	419	655	1,150(2)	3,210	4,954	8,240(2)
1956	2,948	3,865	6,813	381	663	1,044	3,329	4,528	7,857
1957	2,834	3,449	6,283	442	517	959	3,276	3,966	7,242
1958	2,334	2,730	5,064	340	327	667	2,674	3,057	5,731
1959	2,289	2,808	5,097	278	321	599	2,567	3,129	5,696
1960	1,979	2,646	4,625	258	324	582	2,237	2,970	5,207
1961	1,747	2,810	4,557	163	304	467	1,910	3,114	5,024
1962	1,322	2,593	3,915	112	204	316	1,434	2,797	4,231
1963	1,618	2,348	3,966	75	133	208	1,693	2,481	4,174
1964	1,360	2,742	4,102	76	228	309(4)	1,436	2,970	4,411(4)
1965	1,635	2,612	4,247	59	165	224	1,694	2,777	4,471
1966	1,496	2,176	3,672	57	88	163(5)	1,553	2,264	3,835(5)
1967	1,255	2,082	3,337	59	100	159	1,314	2,182	3,496
1968	1,138	2,130	3,268	15	104	122(6)	1,153	2,234	3,390(6)
1969	1,048	2,108	3,156	24	292	316	1,072	2,400	3,472
1970	781	1,559	2,340	12	169	181	793	1,728	2,521
1971	656	1,999	2,655	10	97	107	666	2,096	2,762
1972	622	2,394	3,016	6	118	124	628	2,512	3,140
1973	607	2,392	2,999	18	56	74	625	2,448	3,073
1974	540	3,122	3,662	(1)	(1)	230	(1)	(1)	3,892

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(1) Company-contractor data are not available.
(2) Includes 76 magnetometer crew months not allocated to either company or contractor.
(3) Percentages do not equal 100 percent due to unallocated crew months included in total.
(4) Includes 5 other crew months not allocated to either company or contractor.
(5) Includes 18 magnetometer crew months not allocated to either company or contractor.
(6) Includes 3 magnetometer crew months not allocated to either company or contractor.

Source: Society of Exploration Geophysicists, Annual Reports.

Section III
Table 4a

U.S. PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

	SEISMIC			GRAVITY-MAGNETIC-OTHER			ALL METHODS		
Year	Company	Contractor	Total	Company	Contractor	Total	Company	Contractor	Total
1975	543	2,860	3,416(2)	(1)	(1)	271	(1)	(1)	3,687
1976	484	2,646	3,140(2)	(1)	(1)	245	(1)	(1)	3,385
1977	499	2,564	3,063(2)	(1)	(1)	120	(1)	(1)	3,183
1978	478	3,670	4,148(2)	(1)	(1)	196	(1)	(1)	4,344
1979	829	3,571	4,400(2)	(1)	(1)	199	(1)	(1)	4,599
1980	1,292	3,669	4,962	(1)	(1)	311	(1)	(1)	5,273
1981	1,038	4,839	5,877	(1)	(1)	382	(1)	(1)	6,259
1982	653	5,023	5,676	(1)	(1)	492	(1)	(1)	6,168
1983	588	4,356	4,944	(1)	(1)	334	(1)	(1)	5,278
1984	737	3,918	4,655	(1)	(1)	217	(1)	(1)	4,872
1985	470	3,024	3,494	(1)	(1)	279	(1)	(1)	3,773
1986	401	1,615	2,016	(1)	(1)	84	(1)	(1)	2,100
1987	283	1,278	1,561	(1)	(1)	258	(1)	(1)	1,819

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(1) Company-contractor data are not available.
(2) Total includes government and university activity unallocated to company-contractor totals.

Source: Society of Exploration Geophysicists, Annual Reports.

FREE WORLD PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

Year	United States	Canada	Latin America	Total Western Hemisphere	Western Europe	Africa	Middle East	Asia	Total Free World
1954	7,969	1,652	1,210	10,831	(1)	(1)	(1)	(1)	12,424
1955	8,240	1,599	1,148	10,987	(1)	(1)	(1)	(1)	13,430
1956	7,857	1,512	1,206	10,575	1,329	797	475	451	13,627
1957	7,242	1,389	1,328	9,959	1,778	892	428	598	13,655
1958	5,731	1,130	1,687	8,548	1,749	1,167	589	537	12,590
1959	5,696	841	1,478	8,015	1,225	1,152	492	597	11,481
1960	5,207	686	1,180	7,073	1,118	1,437	334	564	10,526
1961	5,024	664	995	6,683	1,314	1,472	213	521	10,203
1962	4,231	692	1,107	6,030	1,136	1,130	177	726	9,199
1963	4,174	745	1,153	6,072	1,094	978	233	968	9,345
1964	4,411	673	1,133	6,217	1,035	766	283	909	9,210
1965	4,471	801	1,127	6,399	1,039	721	350	1,180	9,689
1966	3,835	1,039	1,012	5,886	890	925	296	1,043	9,040
1967	3,496	1,155	1,078	5,729	1,057	1,082	266	921	9,055
1968	3,390	970	1,012	5,372	711	679	296	708	7,766
1969	3,472	960	898	5,330	676	864	460	935	8,265
1970	2,521	806	1,052	4,379	725	802	286	1,009	7,201
1971	2,762	334	1,105	4,201	738	915	254	1,578	7,686
1972	3,140	503	1,146	4,789	692	938	239	957	7,615
1973	3,073	585	1,236	4,894	627	798	294	950	7,563
1974	3,892	487	1,572	5,951	702	835	389	1,008	8,897(2)
1975	3,687	597(3)	790(3)	5,074	679(3)	676(3)	306(3)	440(3)	7,185(2)
1976	3,385	421(3)	559(3)	4,365	592(3)	674(3)	351(3)	338(3)	6,353(2)
1977	3,183	766	480(4)	4,429	646	806	309	254	6,497(2)
1978	4,148	782	980	5,910	535	613	330	280	7,668(2)
1979	4,400	761	485	5,646	647	674	345	372	7,746(2)

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(1) Area total not available.

(2) Includes crew months allocated to international waters and other areas not specifically identified, 1974-12, 1975-10, 1976-33, 1977-53, 1978-100, 1979-62.

(3) Seismic activity only.

(4) Only partial data for Mexico included.

Source: Society of Exploration Geophysicists, Annual Reports

FREE WORLD PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

Year	United States	Canada	Latin America	Total Western Hemisphere	Western Europe	Africa	Middle East	Asia	Total Free World
1980	4,962	695	645	6,302	569	688	346	520	8,565(2)
1981	5,877	584	1,261	7,722	733	973	452	436	10,706(2)
1982	5,676	527	808	7,011	798	755	480	752	9,821(2)
1983	4,944	658	703	6,305	744	660	359	700	8,789(2)
1984	4,655	616	678	5,949	770	658	351	703	8,465(2)
1985	3,494	899	751	5,144	756	581	347	560	7,388(2)
1986	2,016	453	676	3,145	703	558	295	636	5,337(2)
1987	1,561	382	586	2,519	435	346	295	522	4,142(2)

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(2) Includes crew months allocated to international waters and other areas not specifically identified.

Source: Society of Exploration Geophysicists, Annual Reports

Section III
Table 6

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD OIL DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History: A (SIGNIFICANT)	B (SIGNIFICANT)	C (SIGNIFICANT)	D (SIGNIFICANT)	E	F	Total(1)	Total(1) Significant Size Oil Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
1947	3	7	11	52	129	48	250	73	3,325	2.20
1948	2	2	9	59	241	33	346	72	4,087	1.76
1949	9	4	9	65	172	78	337	87	4,238	2.05
1950	3	10	15	69	283	56	436	97	5,149	1.88
1951	1	1	13	71	345	61	492	86	6,044	1.42
1952	2	2	11	70	361	90	536	85	6,440	1.32
1953	1	6	17	88	283	134	529	112	6,634	1.69
1954	2	3	12	82	308	179	586	99	7,033	1.41
1955	2	5	13	95	329	178	622	115	7,743	1.49
1956	0	2	2	92	333	124	553	96	8,436	1.14
1957	1	1	7	63	339	186	597	72	7,556	0.95
1958	3	2	16	82	229	157	489	103	6,618	1.56
1959	0	4	3	52	255	110	424	59	7,031	0.84
1960	1	3	5	35	283	143	470	44	7,320	0.60
1961	0	1	4	47	246	68	366	52	6,909	0.75
1962	0	1	3	44	264	78	390	48	6,794	0.71
1963	2	1	7	41	341	100	492	51	6,570	0.78
1964	0	3	9	48	248	109	417	60	6,623	0.91
1965	2	3	5	35	268	63	376	45	6,175	0.73
1966	3	1	3	40	336	6	389	47	6,158	0.76
1967	1	4	2	39	278	24	348	46	5,271	0.87
1968	3	5	1	38	210	63	320	47	5,205	0.90
1969	2	3	2	41	245	28	321	48	5,956	0.81
TOTAL	43	74	179	1,348	6,326	2,116	10,086	1,644	143,315	1.15

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), P. 2043.

A Fields.................................Over 50 million barrels
B Fields.................................25-50 million barrels
C Fields.................................10-25 million barrels
D Fields.................................1-10 million barrels
E Fields...........................Less than 1 million barrels
F Fields...........................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 6a

HISTORICAL RECORD:
NUMBER OF U.S. NEW FIELD OIL DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
Cumulative total 1947-1969	43	74	179	1,348	6,326	2,116	10,086	1,644	143,315	1.15
1970	7	0	5	36	199	17	264	48	4,467	1.07
1971	0	1	3	28	184	13	229	32	4,402	0.73
1972	0	1	1	42	234	12	290	44	5,079	0.87
1973	0	2	4	26	251	7	290	32	4,981	0.64
1974	0	1	0	40	296	7	344	41	5,646	0.73
1975	0	2	3	37	373	8	423	42	6,096	0.69
1976	1	1	5	38	375	20	440	45	5,828	0.77
1977	0	3	2	26	398	14	443	31	6,092	0.51
1978	0	1	0	26	392	11	430	27	6,497	0.42
1979	0	0	2	24	437	19	482	26	6,406	0.41
1980	0	0	1	32	579	34	646	33	7,023	0.47
1981	0	0	1	37	602	48	688	38	8,037	0.47
TOTAL	51	86	206	1,740	10,646	2,326	15,055	2,083	213,869	0.97

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2043.

A Fields........................Over 50 million barrels
B Fields........................25-50 million barrels
C Fields........................10-25 million barrels
D Fields........................1-10 million barrels
E Fields..................Less than 1 million barrels
F Fields..................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 7

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

	Number of Fields in Each Size Classification After Six Years of Development History									
Year Drilled	A	B	C	D	E	F	Total(1)	Total(1) Significant Size Gas Fields	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	(SIGNIFICANT)							A-D INCLUSIVE (A+B+C+D)		
1947	5	5	4	30	35	19	98	44	3,325	1.32
1948	3	3	7	33	35	19	100	46	4,087	1.13
1949	8	7	8	34	43	12	112	57	4,238	1.34
1950	4	4	8	28	44	19	107	44	5,149	0.85
1951	10	4	10	41	57	16	138	65	6,044	1.08
1952	10	7	7	44	65	15	148	68	6,440	1.06
1953	3	3	6	40	89	18	159	52	6,634	0.78
1954	4	1	12	51	104	39	211	68	7,033	0.97
1955	2	3	11	33	107	43	199	49	7,743	0.63
1956	2	4	5	52	92	26	181	63	8,436	0.75
1957	9	5	15	70	105	30	234	99	7,556	1.31
1958	3	6	9	55	143	25	241	73	6,618	1.10
1959	4	1	6	51	135	28	225	62	7,031	0.88
1960	6	2	9	63	135	22	237	80	7,320	1.09
1961	4	3	4	35	156	40	242	46	6,909	0.67
1962	3	4	11	61	161	52	292	79	6,794	1.16
1963	4	1	7	38	124	41	215	50	6,570	0.76
1964	4	1	11	37	136	37	226	53	6,623	0.80
1965	1	3	10	38	142	30	224	52	6,175	0.84
1966	1	3	7	36	142	12	201	47	6,158	0.76
1967	4	5	6	26	111	12	164	41	5,271	0.78
1968	1	5	7	27	83	14	137	40	5,205	0.77
1969	3	2	4	35	116	14	174	44	5,956	0.74
TOTAL	98	82	184	958	2,360	583	4,265	1,322	143,315	0.92

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(1) Differs from year-of-discovery total because of consolidations. The reserve estimates for the years 1952 and prior were not specifically based upon six years of development history. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2042.

A Fields........................Over 300 billion cubic feet
B Fields........................150-300 billion cubic feet
C Fields........................60-150 billion cubic feet
D Fields........................6-60 billion cubic feet
E Fields........................6 billion cubic feet
F Fields........................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 7a

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
Cumulative total 1947-1969	98	82	184	958	2,360	583	4,265	1,322	143,315	0.92
1970	4	3	4	25	110	14	160	36	4,467	0.81
1971	1	2	5	45	135	13	201	53	4,402	1.20
1972	3	4	6	52	214	2	281	65	5,079	1.28
1973	1	5	10	59	325	23	423	75	4,981	1.51
1974	1	3	5	61	352	11	433	70	5,646	1.24
1975	2	1	4	69	354	5	435	76	6,096	1.25
1976	2	1	7	63	434	11	518	73	5,828	1.25
1977	1	1	2	56	399	11	470	60	6,092	0.98
1978	1	2	5	58	434	10	510	66	6,497	1.02
1979	0	2	5	29	629	10	675	36	6,406	0.56
1980	0	1	6	47	628	15	697	54	7,023	0.77
1981	1	2	3	55	560	19	640	61	8,037	0.76
TOTAL	115	109	246	1,577	6,934	727	9,708	2,047	213,869	0.96

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2042.

A Fields........................Over 300 billion cubic feet
B Fields........................150-300 billion cubic feet
C Fields.........................60-150 billion cubic feet
D Fields..........................6-60 billion cubic feet
E Fields.............................6 billion cubic feet
F Fields.......................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 8

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD OIL AND GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil & Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
1947	8	12	15	82	164	67	348	117	3,325	3.52
1948	5	5	16	92	276	52	446	118	4,087	2.89
1949	17	11	17	99	215	90	449	144	4,238	3.40
1950	7	14	23	97	327	75	543	141	5,149	2.74
1951	11	5	23	112	402	77	630	151	6,044	2.50
1952	12	9	18	114	426	105	684	153	6,440	2.38
1953	4	9	23	128	372	152	688	164	6,634	2.47
1954	6	4	24	133	412	218	797	167	7,033	2.37
1955	4	8	24	128	436	221	821	164	7,743	2.12
1956	2	6	7	144	425	150	734	159	8,436	1.88
1957	10	6	22	133	444	216	831	171	7,556	2.26
1958	6	8	25	137	372	182	730	176	6,618	2.66
1959	4	5	9	103	390	138	649	121	7,031	1.72
1960	7	5	14	98	418	165	707	124	7,320	1.69
1961	4	4	8	82	402	108	608	98	6,909	1.42
1962	3	5	14	105	425	130	682	127	6,794	1.87
1963	6	2	14	79	465	141	707	101	6,570	1.54
1964	4	4	20	85	384	146	643	113	6,623	1.71
1965	3	6	15	73	410	93	600	97	6,175	1.57
1966	4	4	10	76	478	18	590	94	6,158	1.53
1967	5	9	8	65	389	36	512	87	5,271	1.65
1968	4	10	8	65	293	77	457	87	5,205	1.67
1969	5	5	6	76	361	42	495	92	5.956	1.54
TOTAL	141	156	363	2,306	8,686	2,699	14,351	2,966	143,315	2.07

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(1) Differs from year-of-discovery total because of consolidations.

A Fields......................Over 50 million barrels or over 300 billion cubic feet
B Fields........................25-50 million barrels or 150-300 billion cubic feet
C Fields.........................10-25 million barrels or 60-150 billion cubic feet
D Fields...........................1-10 million barrels or 6-60 billion cubic feet
E Fields..............Less than 1 million barrels or less than 6 billion cubic feet
F Fields..Abandoned as non-profitable

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 8a

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD OIL AND GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil & Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
Cumulative total 1947-1969	141	156	363	2,306	8,686	2,699	14,351	2,966	143,315	2.07
1970	11	3	9	61	309	31	424	84	4,467	1.88
1971	1	3	8	73	319	26	430	85	4,402	1.93
1972	3	5	7	94	448	14	571	109	5,079	2.15
1973	1	7	14	85	576	30	713	107	4,981	2.15
1974	1	4	5	101	648	18	777	111	5,646	1.97
1975	2	3	7	106	727	13	858	118	6,096	1.94
1976	3	2	12	101	809	31	958	118	5,828	2.02
1977	1	4	4	82	797	25	913	91	6,092	1.49
1978	1	3	5	84	826	21	940	93	6,497	1.43
1979	0	2	7	53	1,066	29	1,157	62	6,406	0.97
1980	0	1	7	79	1,207	49	1,343	87	7,023	1.24
1981	1	2	4	92	1,162	67	1,328	99	8,037	1.23
TOTAL	166	195	452	3,317	17,580	3,053	24,763	4,130	213,869	1.93

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(1) Differs from year-of-discovery total because of consolidations.

A Fields..... ....Over 50 million barrels or over 300 billion cubic feet
B Fields.......................25-50 million barrels or 150-300 billion cubic feet
C Fields........................10-25 million barrels or 60-150 billion cubic feet
D Fields...........................1-10 million barrels or 6-60 billion cubic feet
E Fields.............Less than 1 million barrels or less than 6 billion cubic feet
F Fields...Abandoned as non-profitable

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 9

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, ONSHORE

OIL WELLS

Year	Total Wells	Total Footage (Thous)	Total Costs (Thous	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)
1959	25,136	94,331.7	1,232,591.0	3,753	49,037	13.07
1960	20,933	81,168.8	914,306.8	3,878	43,678	11.26
1961	20,868	79,736.6	971,144.0	3,821	46,537	12.18
1962	20,060	83,168.5	1,041,452.5	4,146	51,917	12.52
1963	20,306	77,410.4	940,225.3	3,812	46,303	12.15
1964	20,535	76,376.6	898,606.9	3,719	43,760	11.77
1965	18,370	74,627.6	873,769.0	4,062	47,565	11.71
1966	15,312	60,104.3	745,319.5	3,925	48,676	12.40
1967	14,196	53,676.0	692,118.9	3,781	48,755	12.89
1968	13,010	51,828.6	699,182.3	3,984	53,742	13.49
1969	12,330	52,726.3	790,280.2	4,276	64,094	14.99
1970	12,014	51,734.0	806,429.0	4,306	67,124	15.59
1971	11,096	45,672.2	731,152.7	4,116	65,893	16.01
1972	10,421	45,126.0	792,435.2	4,330	76,042	17.56
1973	9,407	41,980.9	825,029.7	4,462	87,704	19.65
1974	12,820	49,662.3	1,270,731.1	3,874	99,121	25.59

GAS WELLS

Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)
1959	4,974	26,688.7	460,307.0	5,366	92,543	17.25
1960	5,175	28,035.4	487,477.5	5,417	94,199	17.39
1961	5,588	29,454.2	489,799.2	5,271	87,652	16.63
1962	5,743	30,171.3	511,755.7	5,254	89,109	16.96
1963	4,689	24,626.5	392,325.1	5,252	83,669	15.93
1964	4,749	25,991.9	447,248.1	5,473	94,177	17.21
1965	4,654	25,113.4	418,669.6	5,396	89,959	16.67
1966	3,914	23,217.3	446,177.6	5,932	113,995	19.22
1967	3,390	19,821.8	401,857.7	5,847	118,542	20.27
1968	3,145	18,536.1	387,216.3	5,894	123,121	20.89
1969	3,705	21,237.3	439,917.4	5,732	118,736	20.71
1970	3,651	21,044.0	478,705.0	5,764	131,116	22.75
1971	3,494	20,086.7	471,309.2	5,749	134,891	23.46
1972	4,856	26,424.0	626,559.7	5,442	129,028	23.71
1973	6,243	34,368.7	843,960.4	5,505	135,185	24.56
1974	6,540	35,552.2	1,114,933.6	5,436	170,479	31.36

DRY HOLES

Year	Total Wells	Total Footage (Thous)	Total Costs (Thous	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)
1959	18,977	79,735.0	775,839.0	4,202	40,883	9.73
1960	17,427	71,568.4	716,918.5	4,107	41,138	10.02
1961	16,926	71,394.0	706,003.7	4,218	41,711	9.89
1962	16,381	72,462.6	751 889.5	4,424	45,900	10.38
1963	16,072	71,272.9	679,103.1	4,435	42,254	9.53
1964	17,207	76,197.6	723,760.5	4,428	42,062	9.50
1965	15,535	71,075.5	681,175.3	4,575	43,848	9.58
1966	14,168	62,730.4	638,085.6	4,428	45,037	10.17
1967	12,587	57,590.3	591,049.8	4,575	46,957	10.26
1968	12,099	60,145.4	665,359.2	4,971	54,993	11.06
1969	12,255	63,091.7	708,336.3	5,148	57,800	11.23
1970	10,454	53,874.0	695,037.0	5,153	66,485	12.90
1971	9,566	49,877.6	646,412.5	5,214	67,574	12.96
1972	10,173	53,984.4	762,721.5	5,307	74,975	14.13
1973	9,713	51,957.0	827,228.3	5,349	85,167	15.92
1974	11,291	58,327.5	1,301,354.0	5,166	115,256	22.31

ONSHORE WELLS DRILLED

Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)
1953(1)	49,197	198,056.0	2,447,219.3	4,026	49,743	12.36
1955(1)	55,517	221,197.2	2,439,924.0	3,984	43,949	11.03
1956(1)	56,646	227,580.3	2,669,624.0	4,018	47,128	11.73
1959	49,087	200,755.5	2,468,737.0	4,090	50,293	12.30
1960	43,595	180,772.6	2,216,900.0	4,147	50,852	12.26
1961	43,382	180,584.7	2,166,926.9	4,163	49,950	12.00
1962	43,184	185,802.4	2,305,097.8	4,303	53,379	12.41
1963	41,067	173,309.8	2,011,653.4	4,220	48,985	11.61
1964	42,491	178,566.2	2,069,615.5	4,202	48,707	11.59
1965	38,559	167,816.5	1,973,613.9	4,352	51,184	11.76
1966	33,394	146,051.9	1,829,582.8	4,374	54,788	12.53
1967	30,173	131,088.1	1,685,026.5	4,345	55,846	12.85
1968	28,254	130,510.1	1,741,757.7	4,619	61,646	13.35
1969	28,290	137,055.3	1,944,533.9	4,845	68,736	14.19
1970	26,119	126,652.0	1,980,171.0	4,849	75,813	15.63
1971	24,156	115,636.6	1,848,874.4	4,787	76,539	15.99
1972	25,450	125,534.4	2,181,716.4	4,933	85,726	17.38
1973	25,356	128,306.7	2,496,218.3	5,060	98,447	19.46
1974	30,651	143,542.0	3,687,018.7	4,683	120,290	25.69

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(1) Data pertaining to well classification not available.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, ONSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	15,993	63,641.3	2,003,955.3	3,979	125,302	31.49	7,383	40,613.6	1,667,555.1	5,501	225,864	41.06
1976	16,603	65,636.2	2,227,303.1	3,953	134,151	33.93	8,631	45,714.7	2,011,603.6	5,297	233,067	44.00
1977	17,789	72,090.0	2,654,029.9	4,052	149,195	36.82	11,086	58,791.0	2,924,519.8	5,303	263,803	49.74
1978	17,492	71,596.0	3,157,053.7	4,093	180,485	44.10	12,887	68,610.9	3,996,244.5	5,324	310,098	58.25
1979	18,894	77,021.0	3,983,757.0	4,076	210,847	51.73	13,626	72,733.1	5,010,426.4	5,337	367,710	68.90
1980	28,236	114,228.1	6,924,130.2	4,045	245,223	60.62	14,781	81,400.8	6,720,984.8	5,507	454,704	82.57
1981	38,310	158,514.8	11,948,475.5	4,138	311,889	75.38	17,018	95,089.6	10,125,963.9	5,588	595,015	106.49
1982	35,379	140,035.3	10,895,210.4	3,958	307,957	77.81	16,610	96,211.9	12,572,614.1	5,792	756,930	130.69
1983	33,026	126,511.5	8,004,608.8	3,831	242,373	63.27	12,626	69,362.9	6,642,729.5	5,494	526,115	95.76
1984	38,490	149,635.8	8,891,781.7	3,888	231,015	59.42	14,611	78,856.6	5,986,152.1	5,397	409,702	75.91
1985	33,431	133,489.2	7,875,373.3	3,993	235,571	59.00	13,547	72,431.8	5,747,252.8	5,347	424,245	79.34
1986	17,865	72,708.4	4,143,102.8	4,070	231,912	56.98	7,144	39,023.8	2,902,637.2	5,462	406,304	74.39
1987	15,102	62,430.3	3,073,405.2	4,134	203,510	49.23	7,113	38,125.7	2,338,144.9	5,360	328,714	61.33

	DRY HOLES						ONSHORE WELLS DRILLED					
1975	12,556	63,604.0	1,725,506.8	5,066	137,425	27.13	35,932	167,859.0	5,397,017.2	4,672	150,201	32.15
1976	12,679	63,250.0	1,747,814.4	4,989	137,851	27.63	37,913	174,600.9	5,986,721.1	4,605	157,907	34.29
1977	13,734	70,293.6	2,321,990.2	5,118	169,069	33.03	42,609	201,174.6	7,900,540.0	4,721	185,420	39.29
1978	15,079	78,655.3	3,330,509.1	5,216	220,870	42.34	45,458	218,862.2	10,483,807.4	4,814	230,626	47.91
1979	14,743	75,365.5	3,877,721.7	5,111	263,021	51.46	47,263	225,119.6	12,871,899.2	4,763	272,346	57.18
1980	17,722	87,898.7	5,308,941.9	4,959	299,567	60.41	60,739	283,527.7	18,954,056.8	4,667	312,057	66.86
1981	24,012	120,773.3	9,040,265.1	5,030	376,489	74.85	79,340	374,377.6	31,114,704.4	4,719	392,169	83.11
1982	23,199	111,833.9	9,806,473.8	4,821	422,711	87.68	75,188	348,081.1	33,274,298.3	4,629	442,548	95.60
1983	20,614	92,519.6	5,496,480.3	4,488	266,638	59.41	66,266	288,393.9	20,143,818.7	4,352	303,984	69.85
1984	22,688	107,837.2	5,304,338.9	4,753	233,795	49.19	75,789	336,329.6	20,182,272.7	4,438	266,296	60.01
1985	19,596	95,753.4	4,994,684.7	4,886	254,883	52.17	55,574	301,674.4	18,617,310.9	4,531	279,648	61.72
1986	11,266	55,149.6	2,910,348.2	4,895	258,330	52.77	36,275	166,881.9	9,956,088.3	4,600	274,461	59.67
1987	10,117	49,455.4	1,773,914.1	4,888	175,340	35.87	32,332	150,011.3	7,185,464.1	4,640	222,240	47.90

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 10

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, OFFSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per well (ft.)	Avg Cost Per well ($)	Avg Cost Per Foot ($)	Total wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per well (ft.)	Avg Cost Per well ($)	Avg Cost Per Foot ($)
1959	227	2,599.6	88,835.0	9,385	320,704	34.17	75	896.7	48,588.0	11,956	647,840	54.18
1960	301	2,865.0	98,197.1	9,518	326,236	34.27	87	1,042.9	52,700.8	11,988	605,757	50.53
1961	336	3,187.5	115,617.3	9,487	344,099	36.27	86	990.2	47,654.8	11,515	554,125	48.12
1962	342	3,326.0	119,019.6	9,725	348,011	35.78	115	1,260.5	57,016.1	10,961	495,792	45.23
1963	372	3,689.4	130,913.0	9,918	351,917	35.48	90	1,051.2	49,100.6	11,680	545,563	46.71
1964	477	4,612.2	164,388.0	9,669	344,629	35.64	125	1,502.0	63,316.0	12,016	506,528	42.16
1965	487	4,919.9	193,026.3	10,103	396,358	39.23	118	1,379.7	67,430.4	11,693	571,444	48.87
1966	544	5,449.4	240,434.0	10,017	441,974	44.12	146	1,756.8	97,073.9	12,033	664,890	55.25
1967	739	6,258.3	303,250.0	8,469	410,352	48.46	168	1,939.8	99,803.2	11,547	594,067	51.45
1968	757	6,627.4	390,146.0	8,755	515,384	58.87	179	1,995.7	106,519.8	11,149	595,083	53.38
1969	585	5,208.2	320,848.3	8,903	548,459	61.61	222	2,457.8	166,088.0	11,071	748,144	67.57
1970	533	4,683.0	281,628.0	8,786	528,382	60.14	193	2,049.0	138,878.0	10,617	719,575	67.78
1971	309	2,913.0	163,352.3	9,427	528,648	56.08	185	2,035.1	141,544.6	11,001	765,106	69.55
1972	332	3,273.5	213,035.8	9,860	641,674	65.08	230	2,460.6	175,825.9	10,698	764,460	71.46
1973	296	2,686.2	181,945.6	9,075	614,681	67.73	193	1,968.2	153,971.2	10,198	797,778	78.23
1974	253	2,102.9	169,594.7	8,312	670,335	80.65	155	1,578.8	151,606.7	10,186	978,108	96.02
	DRY HOLES						OFFSHORE WELLS DRILLED					
1953(1)							82(2)	783.0	24,499.0	9,549	298,768	31.29
1955(1)							414(3)	3,959.8	160,219.0	9,565	387,002	40.46
1956(1)							479(4)	4,593.4	198,786.0	9,590	415,002	43.28
1959	124	1,260.6	44,936.0	10,166	362,387	35.65	476	4,756.9	182,359.0	9,994	383,107	38.34
1960	150	1,700.4	56,620.4	11,336	337,469	33.30	538	5,608.4	207,518.3	10,424	385,722	37.00
1961	184	1,906.6	67,963.7	10,362	369,368	35.65	606	6,084.4	231,235.8	10,040	381,577	38.00
1962	303	3,168.2	95,541.9	10,456	315,320	30.16	760	7,754.8	271,577.6	10,204	357,339	35.02
1963	324	3,429.7	111,196.9	10,586	343,200	32.42	786	8,170.2	291,210.5	10,395	370,497	35.64
1964	393	4,065.2	130,047.6	10,344	330,910	31.99	995	10,179.3	357,751.7	10,230	359,549	35.14
1965	432	4,588.9	167,366.0	10,623	387,421	36.47	1,037	10,888.6	427,822.6	10,500	412,558	39.29
1966	437	4,664.1	193,649.6	10,673	443,134	41.52	1,127	11,870.3	531,157.5	10,533	471,302	44.75
1967	458	4,719.5	211,098.7	10,305	460,914	44.73	1,365	12,917.7	614,151.9	9,464	449,928	47.54
1968	386	3,995.5	170,936.8	10,351	442,841	42.78	1,322	12,618.6	667,602.7	9,545	504,994	52.91
1969	384	3,983.9	179,201.1	10,375	466,670	44.98	1,191	11,649.9	666,137.4	9,782	559,309	57.18
1970	332	3,506.0	178,005.0	10,560	536,160	50.77	1,058	10,238.0	598,511.0	9,677	565,700	58.46
1971	390	4,059.3	217,720.1	10,409	558,257	53.63	884	9,007.4	522,617.1	10,189	591,196	58.02
1972	431	4,267.0	243,587.6	9,900	565,169	57.09	993	10,001.1	632,449.4	10,072	636,908	63.24
1973	399	3,699.7	242,397.1	9,272	607,512	65.52	888	8,354.1	578,313.9	9,408	651,254	69.23
1974	422	3,720.5	358,768.7	8,816	850,163	96.43	830	7,402.3	679,970.1	8,918	819,241	91.86

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(1) Data pertaining to well classification not available.
(2) Louisiana only.
(3) Includes Louisiana and Texas.
(4) Includes Louisiana, Texas and California.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute. Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 10a

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, OFFSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	283	2,426.5	252,551.7	8,574	892,409	104.08	271	2,762.3	337,855.3	10,193	1,246,699	122.31
1976	275	2,621.0	322,349.5	9,531	1,172,180	122.99	273	2,651.1	395,815.0	9,711	1,449,872	149.30
1977	288	2,570.4	418,724.6	8,924	1,453,905	162.90	393	3,722.3	674,579.0	9,471	1,716,486	181.23
1978	298	2,814.7	542,971.4	9,445	1,822,051	192.91	419	4,208.6	982,577.3	10,044	2,345,053	233.48
1979	349	3,240.0	694,803.4	9,283	1,990,841	214.46	453	4,606.7	1,227,705.6	10,169	2,710,166	266.51
1980	317	2,838.0	844,306.7	8,952	2,663,428	297.52	444	4,418.8	1,445,737.8	9,952	3,256,166	327.19
1981	415	3,467.3	1,074,328.8	8,355	2,588,744	309.85	515	5,168.0	2,122,169.8	10,035	4,120,718	410.64
1982	486	4,269.2	1,563,370.0	8,784	3,216,811	366.21	442	4,591.6	2,165,054.2	10,388	4,898,313	471.54
1983	459	4,312.4	1,499,152.3	9,395	3,266,127	347.65	293	3,124.5	1,213,032.8	10,664	4,140,044	388.96
1984	486	4,381.8	1,322,458.1	9,016	2,721,107	301.81	372	3,787.6	1,352,636.1	10,182	3,636,119	357.12
1985	369	3,400.2	1,265,696.9	9,215	3,430,073	372.23	307	3,274.7	1,299,888.9	10,667	4,234,166	396.94
1986	333	3,138.9	1,040,990.1	9,426	3,126,096	331.65	207	2,300.1	941,245.4	11,112	4,547,079	409.20
1987	224	2,171.7	696,024.5	9,695	3,107,252	320.50	142	1,548.4	421,324.9	10,904	2,967,077	272.11

	DRY HOLES						OFFSHORE WELLS DRILLED					
1975	474	4,594.4	583,789.7	9,693	1,231,624	127.06	1,028	9,783.2	1,174,196.7	9,517	1,142,215	120.02
1976	480	4,545.2	756,794.7	9,469	1,576,656	166.51	1,028	9,817.2	1,474,959.2	9,550	1,434,785	150.24
1977	536	5,227.2	962,609.5	9,752	1,795,913	184.15	1,217	11,519.9	2,055,913.1	9.466	1,689,329	178.47
1978	480	4,733.4	1,051,734.0	9,861	2,191,112	222.20	1,197	11,756.7	2,577,282.7	9,821	2,153,118	219.24
1979	458	4,545.7	1,284,522.2	9,925	2,804,633	282.58	1,260	12,392.5	3,207,031.2	9,835	2,545,262	258.80
1980	511	5,246.4	1,556,254.3	10,266	3,045,507	296.66	1,272	12,503.3	3,846,298.9	9,829	3,023,819	307.64
1981	546	5,787.8	2,354,253.5	10,599	4,311,820	406.80	1,476	14,422.5	5,550,752.1	9,771	3,760,672	384.87
1982	536	5,676.3	2,425,396.1	10,590	4,524,993	427.29	1,464	14,537.1	6,153,820.3	9,930	4,203,429	423.31
1983	518	5,395.0	2,248,538.9	10,415	4,340,809	416.78	1,270	12,831.9	4,960,724.0	10,104	3,906,082	386.59
1984	563	6,089.8	2,348,852.4	10,817	4,172,029	385.70	1,421	14,259.2	5,023,946.6	10,035	3,535,501	352.33
1985	571	6,141.0	2,513,705.9	10,755	4,402,287	409.32	1,247	12,815.9	5,079,291.7	10,277	4,073,287	396.35
1986	358	3,968.7	1,614,079.2	11,086	4,508,601	406.69	898	9,407.7	3,596,314.6	10,476	4,004,805	382.28
1987	343	3,625.1	935,935.9	10,569	2,728,676	258.18	709	7,345.3	2,053,285.3	10,360	2,896,030	279.64

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute. Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

UNITED STATES
ESTIMATED DRILLING COSTS, ALL WELLS BY CLASSIFICATION

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg. Cost Per Foot (
1959	25,413	96,931.3	1,321,426.0	3,814	51,998	13.63	5,049	27,585.5	508,895.0	5,464	100,791	18.45
1960	21,294	84,033.9	1,110,701.1	3,946	52,160	13.22	5,262	29,078.3	540,179.3	5,526	102,656	18.58
1961	21,204	82,924.1	1,086,761.4	3,911	51,253	13.11	5,674	30,444.4	537,433.9	5,366	94,719	17.65
1962	21,402	86,494.5	1,160,472.1	4,041	54,223	13.42	5,858	31,431.8	568,771.8	5,366	97,093	18.10
1963	20,678	81,099.8	1,071,138.2	3,922	51,801	13.21	4,779	25,677.7	441,425.7	5,373	92,368	17.19
1964	21,012	80,988.9	1,062,994.9	3,854	50,590	13.13	4,874	27,493.8	510,564.1	5,641	104,753	18.57
1965	18,857	76,547.5	1,066,795.3	4,059	56,573	13.94	4,772	26,493.2	486,100.0	5,552	101,865	18.35
1966	15,856	65,553.6	985,753.6	4,134	62,169	15.04	4,060	24,974.1	543,251.6	6,151	133,806	21.75
1967	14,935	59,934.3	995,368.9	4,013	66,647	16.61	3,558	21,761.6	501,660.9	6,116	140,995	23.05
1968	13,767	58,456.1	1,089,328.4	4,246	79,126	18.63	3,324	20,531.8	493,736.1	6,177	148,537	24.05
1969	12,915	57,934.4	1,117,128.5	4,486	86,499	19.28	3,927	23,695.2	606,005.4	6,034	154,318	25.58
1970	12,547	56,417.0	1,088,057.0	4,496	86,718	19.29	3,844	23,093.0	617,583.0	6,007	160,662	26.75
1971	11,405	48,585.2	894,505.1	4,260	78,431	18.41	3,679	22,121.8	612,853.8	6,013	166,582	27.70
1972	10,753	48,399.5	1,005,471.1	4,501	93,506	20.77	5,086	28,884.6	802,385.5	5,679	157,764	27.78
1973	9,705	44,667.1	1,006,975.3	4,602	103,758	22.54	6,427	36,336.9	997,931.6	5,654	155,272	27.46
1974	13,073	51,765.2	1,440,325.8	3,960	110,176	27.82	6,695	37,131.1	1,266,540.3	5,546	189,177	34.11

	DRY HOLES						TOTAL WELLS DRILLED					
							49,279	198,839.0	2,471,718.3	4,035	50,158	12.43
							55,931	225,157.0	2,600,143.0	4,026	46,488	11.5
							57,125	232,173.7	2,868,410.0	4,064	50,213	12.35
1959	19,101	80,995.6	820,775.0	4,240	42,970	10.13	49,563	205,512.4	2,651,096.0	4,146	53,500	12.90
1960	17,577	73,268.8	773,538.9	4,168	44,009	10.56	44,133	186,380.9	2,424,418.3	4,223	54,934	13.01
1961	17,110	73,300.6	773,967.3	4,284	45,235	10.56	43,988	186,669.1	2,398,162.6	4,244	54,518	12.85
1962	16,684	75,630.9	847,431.5	4,533	50,793	11.20	43,944	193,557.2	2,576,675.4	4,405	58,635	13.31
1963	16,396	74,702.6	790,300.1	4,556	48,201	10.58	41,853	181,480.1	2,302,864.0	4,336	55,023	12.69
1964	17,600	80,262.7	853,808.2	4,560	48,512	10.64	43,486	188,745.4	2,427,367.2	4,340	55,820	12.86
1965	15,967	75,664.4	848,541.2	4,739	53,143	11.21	39,596	178,705.1	2,401,436.5	4,513	60,648	13.44
1966	14,605	67,394.5	831,735.2	4,614	56,949	12.34	34,521	157,922.3	2,360,740.3	4,575	68,386	14.95
1967	13,045	62,309.9	802,148.5	4,777	61,491	12.87	31,538	144,005.8	2,299,178.4	4,566	72,902	15.97
1968	12,485	64,140.9	826,295.9	5,137	66,183	12.88	29,576	143,128.8	2,409,360.4	4,839	81,463	16.83
1969	12,639	67,075.6	887,537.4	5,307	70,222	13.23	29,481	148,705.2	2,610,671.3	5,044	88,554	17.56
1970	10,786	57,380.0	873,042.0	5,320	80,942	15.21	27,177	136,890.0	2,578,682.0	5,037	94,885	18.84
1971	9,956	53,936.9	864,132.7	5,418	86,795	16.02	25,040	124,644.0	2,371,491.5	4,978	94,703	19.03
1972	10,604	58,251.4	1,006,309.2	5,493	94,899	17.28	26,443	135,535.5	2,814,165.8	5,126	106,424	20.76
1973	10,112	55,656.7	1,069,625.4	5,504	105,778	19.22	26,244	136,660.8	3,074,532.3	5,207	117,152	22.50
1974	11,713	62,048.0	1,660,122.7	5,297	141,733	26.76	31,481	150,944.3	4,366,988.8	4,795	138,718	28.93

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(1) Data pertaining to well classification not available.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry", Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 11a

UNITED STATES
ESTIMATED DRILLING COSTS, ALL WELLS BY CLASSIFICATION

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	16,276	66,067.8	2,256,507.0	4,059	138,640	34.15	7,654	43,375.9	2,005,410.4	5,667	262,008	46.23
1976	16,878	68,257.2	2,549,652.6	4,044	151,064	37.35	8,904	48,365.8	2,407,418.6	5,432	270,375	49.78
1977	18,077	74,660.3	3,072,754.5	4,130	169,981	41.16	11,479	62,513.2	3,599,098.8	5,446	313,538	57.57
1978	17,790	74,410.8	3,700,025.1	4,182	207,983	49.73	13,306	72,819.5	4,978,821.9	5,472	374,178	68.38
1979	19,243	80,261.0	4,678,560.4	4,170	243,130	58.30	14,079	77,339.9	6,238,126.0	5,493	443,080	80.66
1980	28,553	117,066.2	7,768,436.9	4,099	272,070	66.37	15,225	85,819.6	8,166,722.6	5,636	536,402	95.17
1981	38,725	161,982.1	13,022,804.3	4,183	336,289	80.40	17,533	100,257.5	12,248,133.7	5,718	698,576	122.17
1982	35,865	144,304.5	12,458,580.5	4,024	347,374	86.33	17,052	100,803.5	14,737,668.3	5,912	864,278	146.19
1983	33,485	130,823.9	9,503,761.1	3,907	283,821	72.64	12,919	72,487.3	7,855,762.3	5,611	608,078	108.37
1984	38,976	154,017.6	10,214,239.8	3,952	262,065	66.32	14,983	82,644.2	7,338,788.2	5,516	489,808	88.80
1985	33,800	136,889.5	9,141,070.2	4,050	270,446	66.78	13,854	75,706.5	7,047,141.7	5,465	508,672	93.09
1986	18,198	75,847.3	5,184,092.9	4,168	284,872	68.35	7,351	41,324.0	3,843,882.6	5,622	522,906	93.01
1987	15,326	64,602.0	3,769,429.7	4,215	245,950	58.35	7,255	39,674.1	2,759,469.8	5,469	380,354	69.55

	DRY HOLES						TOTAL WELLS DRILLED					
1975	13,030	68,198.4	2,309,296.5	5,234	177,229	33.86	36,960	177,642.1	6,571,213.9	4,806	177,793	36.99
1976	13,159	67,795.2	2,504,609.1	5,152	190,334	36.94	38,941	184,418.1	7,461,680.3	4,736	191,615	40.46
1977	14,270	75,520.8	3,284,599.7	5,292	230,175	43.49	43,826	212,694.4	9,956,453.0	4,853	227,181	46.81
1978	15,559	83,388.7	4,382,243.2	5,359	281,653	52.56	46,655	230,618.9	13,061,090.0	4,943	279,950	56.64
1979	15,201	79,911.3	5,162,244.0	5,256	339,598	64.61	48,523	237,512.1	16,078,930.4	4,894	331,367	67.71
1980	18,233	93,145.1	6,865,196.2	5,108	376,525	73.71	62,011	296,031.0	22,800,355.7	4,773	367,682	77.03
1981	24,558	126,560.5	11,394,518.6	5,154	463,984	90.03	80,816	388,800.1	36,665,456.5	4,811	453,691	94.30
1982	23,735	117,510.1	12,231,869.9	4,951	515,352	104.09	76,652	362,618.2	39,428,118.6	4,731	514,378	108.73
1983	21,132	97,914.6	7,745,019.2	4,633	366,507	79.11	67,536	301,225.8	25,104,542.6	4,460	371,721	83.35
1984	23,251	113,927.0	7,653,191.4	4,900	329,155	67.18	77,210	350,588.7	25,206,219.3	4,541	326,463	71.90
1985	20,167	101,894.4	7,508,390.7	5,053	372,311	73.68	67,821	314,490.4	23,696,602.5	4,637	349,399	75.35
1986	11,624	59,118.3	4,524,427.4	5,086	389,232	76.53	37,173	176,289.6	13,552,402.8	4,742	364,577	76.88
1987	10,460	53,080.5	2,709,850.0	5,075	259,068	51.05	33,041	157,356.6	9,238,749.5	4,762	279,615	58.72

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry", Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 12

FREE WORLD TOTAL WELL COMPLETIONS

Area/Country	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	29,467	27,300	28,755	27,602	32,893	39,097	41,455	46,479	48,513	51,263	62,462	80,537	88,101
Canada	3,108	3,175	3,548	4,621	4,227	4,242	6,221	6,197	7,170	7,489	8,813	6,927	6,464
Mexico	502	516	431	422	408	353	336	307	406	333	434	412	336
Total North America	33,077	30,991	32,734	32,645	37,528	43.692	48,012	52,938	56,089	59,085	71.709	87,876	94,901
Argentina	579	595	623	597	606	552	646	647	865	773	953	904	822
Brazil	177	175	179	128	176	228	288	245	256	385	463	668	1,045
Ecuador	37	81	59	58	37	15	19	16	16	40	23	27	27
Peru	135	121	117	89	152	161	150	160	157	451	540	426	149
Trinidad-Tobago	135	220	196	212	200	189	192	217	215	188	218	243	200
Venezuela	589	464	371	427	416	284	337	446	637	1,030	1,275	1,491	1,500
Other	177	189	158	127	140	128	156	194	183	289	326	380	357
Total Latin America	1,829	1,845	1,703	1,638	1,727	1,557	1,788	1,925	2,329	3,156	3,798	4,139	4,100
Total Western Hemisphere	34,906	32,836	34,437	34,283	39,255	45,249	49,800	54,908	58,418	62,241	75,507	92,015	99,001
Total North Sea	88	100	107	113	176	207	210	166	134	227	273	283	283
Other European	274	318	352	287	313	369	345	410	525	448	758	810	777
Total Europe	362	418	459	400	489	576	555	576	659	675	1,031	1,093	1,060
Algeria	115	109	80	83	79	107	54	130	60	267	249	159	0
Gabon	26	36	36	44	59	49	44	31	35	38	40	61	56
Libya	250	87	77	74	79	66	64	109	177	184	192	157	110
Nigeria	168	207	258	239	249	192	143	118	104	116	132	202	144
Other	150	214	194	157	162	191	130	208	208	236	257	369	461
Total Africa	709	653	645	597	628	605	435	596	584	841	870	948	771
Abu Dhabi(1)	7	19	37	37	64	49	82	67	78	89	123	146	169
Dubai(1)	0	7	16	18	17	17	30	31	12	7	13	11	23
Sharjah(1)	0	2	2	2	3	2	1	0	0	-	2	4	1
Iran	44	104	61	81	100	140	182	185	180	0	-	-	-
Iraq	6	17	0	16	2	0	2	NA	NA	66	67	-	-
Kuwait(2)	13	8	2	0	0	0	8	0	0	12	36	5	8
Saudi Arabia(2)	43	56	178	323	300	210	163	180	145	144	223	229	25
Neutral Zone(2)	23	12	9	13	19	14	15	4	0	3	4	5	6
Qatar	7	10	8	9	2	7	4	2	2	46	53	51	52
Oman	27	0	56	49	40	55	42	51	61	102	89	110	159
Other	72	58	56	61	83	102	75	124	107	143	207	210	128
Total Middle East	242	293	425	609	630	596	604	644	585	621	817	771	571
Indonesia	84	422	312	501	630	588	513	409	536	473	635	727	323
Other	162	157	223	197	180	157	229	295	440(4)	2,492	3,443	3,539	592
Total Far East	246	579	535	698	810	745	742	704	976	2,965	4,078	4,266	915
Total Eastern Hemisphere	1,559	1,943	2,064	2,304	2,557	2,522	2,336	2,520	2,804	5,102	6,796	7,078	3,317
TOTAL FREE WORLD	36,465	34,779	36,501	36,587	41,812	47,771	52,136	57,428	61,222	67,343	82,303	99,093	102,318

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(1) Member of United Arab Emirates.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(3) Less than one-tenth of one percent.
NA Not Available.

Source: United States, American Association of Petroleum Geologists and American Petroleum Institute
Rest of Free World, Oil and Gas Journal

FREE WORLD TOTAL WELL COMPLETIONS

Area/Country	1983	1984	1985
United States	75,738	84,983	70,708
Canada	7,095	8,765	12,564
Mexico	65	268	297
Total North America	82,898	94,016	83,569
Argentina	130	126	1,024
Brazil	1,145	963	1,074
Ecuador	10	25	22
Peru	23	150	160
Trinidad-Tobago	11	151	197
Venezuela	19	406	361
Other	49	241	299
Total Latin America	1,387	2,062	3,137
Total Western Hemisphere	84,285	96,078	86,706
Total North Sea	402	141	462
Other European	665	648	817
Total Europe	1,067	789	1,279
Algeria	32	NA	NA
Gabon	62	43	46
Libya	--	99	NA
Nigeria	124	89	62
Other	475	450	401
Total Africa	693	NA	NA
United Arab Emirates	34	143	NA
Iran	--	--	NA
Iraq	--	--	NA
Kuwait(1)	--	11	NA
Saudi Arabia(1)	--	--	NA
Neutral Zone(1)	--	--	NA
Qatar	--	8	NA
Oman	38	46	NA
Other	39	62	NA
Total Middle East	111	270	NA
Indonesia	969	756	658
Other	384	1,219	6,684(2)
Total Far East	1,353	1,975	7,340
Total Eastern Hemisphere	3,224	NA	NA
TOTAL FREE WORLD	87,509	NA	NA

(1) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(2) Includes 5,555 wells in China.

Source: United States--American Petroleum Institute, Quarterly Completion Report
Rest of World--American Association of Petroleum Geologists

Section III
Table 13

FREE WORLD TOTAL EXPLORATORY WELL COMPLETIONS

Area/Country	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	7,693	6,922	7,539	7,466	8,619	9,214	9,234	9,961	10,677	10,484	11,916	15,168	16,482
Canada	1,537	1,534	1,633	2,219	1,735	1,649	2,481	2,801	3,144	2,925	3,857	3,074	2,346
Mexico	130	129	143	104	98	87	79	79	83	NA	85	63	65
Total North America	9,360	8,585	9,315	9,789	10,452	10,350	11,794	12,841	13,904	NA	15,858	18,305	18,893
Argentina	113	157	110	139	117	78	83	143	81	NA	110	127	107
Brazil	100	87	80	78	86	87	105	155	89	NA	166	245	328
Ecuador	20	15	20	8	5	3	3	5	3	NA	0	3	5
Peru	28	21	25	31	43	43	36	37	28	NA	13	17	12
Trinidad-Tobago	23	35	23	15	13	14	23	17	8	NA	51	16	23
Venezuela	90	44	64	63	76	35	45	48	60	NA	69	351	250
Other	70	60	77	50	65	61	67	56	60	NA	NA	211	150
Total Latin America	444	419	399	384	405	321	362	406	329	NA	409	970	879
Total Western Hemisphere	9,804	9,004	9,714	10,173	10,857	11,271	12,156	13,247	14,233	NA	16,267	19,275	19,772
Total North Sea	66	53	51	70	92	124	109	21	38	168	NA	135	201
Other European	93	146	159	147	151	172	163	231	259	157	NA	372	398
Total Europe	159	199	210	217	243	296	272	252	297	325	NA	507	599
Algeria	37	25	10	13	9	17	11	11	3	3	2	1	1
Gabon	13	11	17	15	13	23	19	19	20	22	15	23	16
Libya	51	41	34	25	32	36	22	33	41	30	35	43	34
Nigeria	31	55	61	45	51	33	21	24	35	22	31	26	30
Other	131	125	101	80	86	91	89	117	102	133	124	191	216
Total Africa	263	257	223	178	191	200	162	204	201	204	207	284	297
Abu Dhabi(1)	7	8	21	7	3	0	9	5	19	NA	6	NA	22
Dubai(1)	0	0	0	1	0	0	5	9	5	NA	2	NA	3
Sharjah(1)	0	2	1	0	0	0	1	0	0	NA	2	NA	1
Iran	11	6	2	18	27	26	26	25	10	NA	0	NA	0
Iraq	1	0	0	3	2	0	2	NA	NA	NA	0	NA	0
Kuwait(2)	1	2	0	0	0	0	2	0	0	NA	2	NA	8
Saudi Arabia(2)	2	2	6	3	4	9	24	4	25	NA	40	NA	25
Neutral Zone(2)	0	0	0	0	0	0	0	0	0	NA	0	NA	2
Qatar	2	1	6	1	0	0	0	0	0	NA	3	NA	4
Oman	2	0	16	0	0	0	0	10	24	NA	15	NA	31
Other	46	27	29	32	34	65	51	46	39	NA	18	NA	71
Total Middle East	72	48	81	65	70	100	120	99	122	NA	88	NA	167
Indonesia	84	135	137	169	176	186	130	115	146	NA	182	NA	167
Other	162	126	175	173	162	127	119	132	249(3)	NA	221	NA	297
Total Far East	246	261	312	342	338	313	249	247	395	377	403	125	464
Total Eastern Hemisphere	740	765	826	802	842	909	803	802	1,015	NA	698	916	1,527
TOTAL FREE WORLD	10,544	9,769	10,540	10,975	11,699	12,180	12,959	14,049	15,248	14,315	16,695	20,191	21,299

(1) Member of United Arab Emirates.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(3) Includes Oceania.
NA Not Available.
NOTE: Complete data for 1979 through 1981 is not available for all areas.

Source: United States, American Association of Petroleum Geologists and American Petroleum Institute
Rest of Free World, Oil and Gas Journal

Section III
Table 13a

FREE WORLD TOTAL EXPLORATORY WELL COMPLETIONS

Area/Country	1983	1984	1985
United States	13,845	15,138	12,430
Canada	2,041	2,863	3,404
Mexico	65	44	78
Total North America	15,951	18,045	15,912
Argentina	130	136	161
Brazil	262	243	229
Ecuador	10	3	2
Peru	23	29	13
Trinidad-Tobago	11	4	14
Venezuela	19	18	6
Other	49	66	111
Total Latin America	504	499	536
Total Western Hemisphere	16,455	18,544	16,448
Total North Sea	220	79	254
Other European	308	317	362
Total Europe	528	396	616
Algeria	2	3	25
Gabon	11	18	13
Libya	--	51	45
Nigeria	24	12	17
Other	167	124	184
Total Africa	204	208	284
United Arab Emirates	34	17	NA
Iran	--	--	NA
Iraq	--	--	NA
Kuwait(1)	--	11	NA
Saudi Arabia(1)	--	--	NA
Neutral Zone(1)	--	--	NA
Qatar	--	3	NA
Oman	38	29	NA
Other	39	50	NA
Total Middle East	111	110	NA
Indonesia	NA	216	208
Other(2)	NA	468	256
Total Far East	NA	684	464
Total Eastern Hemisphere	NA	1,398	NA
TOTAL FREE WORLD	NA	19,942	NA

(1) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(2) Includes Oceania.
NA=Not Available

Source: United States--American Petroleum Institute, Quarterly Completion Report
Rest of Free World--American Association of Petroleum Geologists

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Alabama	2	4	5	9	8	3	2	8	8	7	7	4	5	6
Alaska	0	0	0	0	0	0	0	0	0	0	0	5	9	9
Arkansas	18	17	17	19	26	20	16	17	23	20	14	12	14	13
Arizona	0	0	1	1	1	1	1	1	1	1	1	0	1	1
California	173	134	157	165	169	138	143	119	97	80	93	80	82	97
Colorado	9	11	25	34	43	66	75	60	47	36	43	35	27	30
Florida	7	2	1	3	6	3	2	1	1	1	0	2	1	1
Georgia	0	0	0	2	1	0	0	0	0	0	0	1	1	0
Idaho	0	2	0	2	1	0	0	0	0	0	0	0	0	0
Illinois	68	66	61	66	69	80	96	75	49	46	37	37	37	32
Indiana	22	25	23	22	18	8	7	9	6	7	7	8	4	6
Iowa	0	0	0	0	0	1	2	1	2	3	2	0	1	1
Kansas	115	129	165	162	164	157	178	169	155	130	138	112	105	101
Kentucky	6	12	19	17	15	16	12	10	9	6	7	6	5	6
Louisiana	239	231	243	257	280	312	401	442	423	309	332	287	275	261
Maryland	0	0	0	0	0	0	1	0	1	0	1	0	0	0
Michigan	19	14	21	17	18	16	12	12	12	9	26	35	23	15
Mississippi	31	30	39	29	28	32	33	25	34	44	67	61	58	46
Missouri	0	0	0	0	1	0	0	1	1	1	0	1	1	1
Montana	10	8	14	36	41	31	38	38	29	23	22	20	23	27
Nebraska	1	9	15	17	15	24	37	32	32	22	25	23	26	16
Nevada	0	0	0	0	1	2	1	1	0	0	1	0	1	0
New Mexico	48	56	97	149	162	98	117	132	144	109	113	106	102	94
New York	0	0	0	0	0	0	0	1	0	1	1	1	1	2
North Carolina	0	0	0	0	1	0	0	0	0	0	0	0	0	0
North Dakota	0	1	4	24	31	32	23	24	31	33	30	16	15	14
Ohio	0	0	0	0	1	1	2	1	0	2	3	5	7	8
Oklahoma	238	269	302	326	344	330	326	286	243	204	226	179	197	174
Oregon	0	1	0	0	0	1	1	0	0	0	0	1	0	0
Pennsylvania	0	0	0	4	8	10	5	5	12	10	11	10	8	9
South Dakota	0	1	1	1	3	2	2	1	1	1	4	1	1	1
Tennessee	0	0	0	0	0	0	1	0	1	0	0	0	1	0
Texas	922	1,063	1,230	1,173	1,039	1,018	1,059	1,054	951	719	750	604	628	570
Utah	11	4	16	23	15	14	13	21	47	37	32	29	33	29
Virginia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Washington	0	0	0	0	1	0	0	1	1	0	1	1	1	1
West Virginia	0	0	0	0	1	2	1	2	3	4	6	5	9	13
Wyoming	78	65	88	83	102	90	79	71	65	58	74	63	58	53
TOTAL	2,017	2,154	2,544	2,641	2,613	2,508	2,686	2,620	2,429	1,923	2,074	1,750	1,760	1,637

Source: Hughes Tool Company

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

STATE	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	5	2	1	2	2	3	6	7	8	15	13	12	14	17
Alaska	6	5	6	13	21	20	28	14	5	5	5	9	14	14
Arkansas	10	9	11	10	8	7	16	13	15	15	15	18	14	15
Arizona	1	2	1	1	3	1	2	0	1	0	2	1	0	1
California	85	93	89	79	83	87	78	52	46	46	51	72	80	89
Colorado	23	21	19	16	16	17	23	25	30	35	42	46	42	38
Florida	0	1	4	2	2	1	1	4	11	18	9	7	9	5
Georgia	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Idaho	1	0	0	0	0	0	0	1	0	0	1	0	0	1
Illinois	25	20	24	30	30	22	17	14	13	14	6	7	19	22
Indiana	6	6	5	5	3	2	1	1	1	1	0	1	2	0
Iowa	1	0	0	1	0	0	0	0	1	2	1	0	2	0
Kansas	96	87	70	56	41	35	38	30	29	24	28	44	57	51
Kentucky	10	8	12	13	9	5	2	1	2	2	1	2	1	1
Louisiana	265	282	270	256	235	233	230	204	194	215	205	203	228	231
Maryland	0	2	2	4	0	1	1	0	0	1	0	0	0	1
Michigan	14	13	11	9	10	10	10	11	12	17	20	24	28	24
Mississippi	46	39	35	34	33	36	40	43	39	37	29	29	25	32
Missouri	1	0	0	1	0	0	0	0	0	0	1	0	0	0
Montana	22	21	26	24	22	34	31	17	17	20	19	24	27	28
Nebraska	12	11	10	8	5	5	10	6	5	6	5	7	9	8
Nevada	0	1	2	1	1	2	0	0	0	0	0	1	0	2
New Mexico	84	79	65	60	56	68	64	40	47	56	62	79	71	54
New York	1	1	1	1	1	1	0	0	1	0	1	7	8	9
North Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Dakota	9	14	12	12	11	13	12	9	9	7	10	12	17	19
Ohio	12	56	22	14	18	22	22	24	17	22	36	30	21	26
Oklahoma	158	158	163	141	101	106	120	98	90	90	115	146	177	186
Oregon	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Pennsylvania	12	11	9	10	7	5	7	9	9	8	11	14	10	10
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	1	1	2	0	0	1	1	2	1	1	1	1	1	2
Tennessee	0	0	0	1	1	0	1	2	1	0	0	0	0	0
Texas	500	477	425	387	340	329	322	302	291	338	376	508	638	653
Utah	22	17	14	14	15	12	12	12	17	34	38	42	26	19
Virginia	1	1	1	0	0	0	0	1	1	0	1	2	3	0
Washington	1	0	0	1	1	0	0	0	0	0	0	0	0	0
West Virginia	14	16	24	19	15	16	18	16	17	17	20	16	10	12
Wyoming	55	48	50	48	44	75	81	71	45	61	70	107	107	86
TOTAL	1,500	1,502	1,387	1,273	1,134	1,169	1,194	1,028	976	1,107	1,195	1,471	1,660	1,656

Source: Hughes Tool Company

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	13	13	13	11	17	15	16	15	22	10	11
Alaska	15	16	13	14	23	22	14	14	20	13	6
Arkansas	14	14	10	27	34	27	26	26	24	10	9
Arizona	1	0	0	1	1	1	0	0	0	0	0
California	90	94	96	120	155	129	106	107	80	49	61
Colorado	45	41	40	61	82	60	52	54	50	24	25
Florida	6	6	5	4	8	5	4	4	7	2	3
Georgia	0	0	0	0	1	2	0	0	0	0	0
Hawaii	0	0	0	0	1	0	1	0	0	0	0
Idaho	1	3	2	3	3	2	1	1	1	1	0
Illinois	16	28	13	25	45	76	60	41	28	6	3
Indiana	3	4	0	0	1	7	6	7	4	1	1
Iowa	1	0	0	0	0	0	0	0	0	0	0
Kansas	67	76	66	120	196	157	124	128	91	47	49
Kentucky	2	3	0	0	5	10	8	8	6	3	2
Louisiana	292	338	347	427	456	343	283	310	282	142	135
Maryland	0	1	1	0	1	0	0	0	0	0	0
Michigan	24	24	25	31	36	31	29	34	34	24	22
Mississippi	41	44	40	58	71	42	33	32	31	15	13
Missouri	0	0	0	0	0	0	0	0	0	0	0
Montana	27	30	33	49	81	36	24	36	23	10	9
Nebraska	9	10	9	14	15	9	9	9	6	3	5
Nevada	3	2	4	5	5	3	1	5	5	3	2
New Mexico	69	76	88	118	135	103	65	78	71	29	35
New York	7	7	9	7	12	15	10	9	5	2	2
North Carolina	0	0	0	0	0	0	0	0	0	0	0
North Dakota	24	39	56	83	119	69	43	51	38	13	14
Ohio	33	45	46	75	98	57	39	51	29	18	20
Oklahoma	233	258	247	397	698	622	285	319	251	141	136
Oregon	0	0	1	1	2	1	0	0	0	0	0
Pennsylvania	15	25	29	29	44	33	22	36	30	18	17
Rhode Island	1	4	4	2	2	2	0	0	0	0	0
South Dakota	3	2	1	2	2	2	1	2	2	1	0
Tennessee	0	0	0	1	0	2	1	0	0	0	0
Texas	778	855	770	988	1,316	990	796	850	677	311	293
Utah	30	32	29	42	69	40	37	45	29	11	7
Virginia	1	1	1	1	3	2	2	2	4	(1)	(1)
Washington	0	0	0	0	1	1	1	1	0	(1)	(1)
West Virginia	17	27	30	38	45	49	34	38	26	15	13
Wyoming	120	137	147	156	191	143	96	115	93	35	39
Other										7	3
TOTAL	2,001	2,255	2,176	2,910	3,970	3,105	2,229	2,428	1,969	964	936

(1) Included in other.

Source: Hughes Tool Company

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1967 Exploratory	1967 Development	1967 Total(1)	1968 Exploratory	1968 Development	1968 Total(1)	1969 Exploratory	1969 Development	1969 Total(1)
Alabama	28	10	38	18	14	32	34	14	48
Alaska	33	41	74	18	86	107	12	51	67
Offshore*	--	--	--	N.A.	N.A.	N.A.	2	44	50
Arizona	14	10	24	6	4	10	24	14	39
Arkansas	87	320	409	111	211	322	131	288	422
California	352	2,182	2,668	353	2,366	2,888	288	1,712	2,167
Offshore*	12	73	101	28	304	367	17	210	262
Colorado	277	262	539	270	224	495	538	276	820
Florida	11	--	11	9	4	13	8	5	13
Georgia	--	--	--	--	--	--	2	--	2
Illinois	328	861	1,339	253	789	1,226	241	639	988
Indiana	254	220	510	158	179	367	178	189	407
Iowa	1	--	25	--	--	22	--	--	7
Kansas	1,270	1,937	3,345	1,186	1,849	3,107	1,058	1,919	3,105
Kentucky	458	1,086	1,647	453	828	1,379	256	696	1,030
Louisiana	935	2,209	3,185	1,026	2,415	3,478	865	2,272	3,174
Offshore*	296	559	867	352	696	1,068	147	678	835
Michigan	173	191	365	174	196	380	164	168	348
Minnesota	--	--	--	--	--	1	--	--	--
Mississippi	347	368	722	382	297	688	373	342	716
Missouri	4	--	19	4	12	38	7	22	57
Montana	302	252	580	465	400	882	499	296	834
Nebraska	95	84	179	196	89	288	285	98	388
Nevada	7	2	9	--	--	--	14	2	16
New Mexico	166	925	1,118	154	743	925	190	984	1,219
New York	35	176	238	9	97	120	6	128	166
North Carolina	--	--	--	--	--	--	--	--	--
North Dakota	60	93	156	121	62	186	178	74	252
Ohio	75	1,186	1,267	79	1,084	1,165	53	1,185	1,255
Oklahoma	421	2,431	3,074	422	2,318	2,996	546	2,567	3,395
Oregon	1	--	1	--	--	--	--	--	--
Offshore*	1	--	1	--	--	--	--	--	--
Pennsylvania	59	564	683	62	733	897	43	853	1,018
South Dakota	4	--	4	4	--	4	56	--	56
Tennessee	47	--	47	25	1	26	23	3	27
Texas	2,508	6,628	9,576	2,207	5,407	8,743	2,718	5,938	9,233
Offshore*	61	41	102	40	13	53	103	11	114
Utah	67	75	144	41	58	99	103	71	175
Vermont	--	--	--	--	--	--	1	--	1
Virginia	--	--	--	--	--	--	8	2	10
Washington	3	--	3	2	--	2	--	--	--
Offshore*	1	--	1	--	--	--	--	--	--
West Virginia	36	738	777	87	646	735	83	819	920
Wyoming	420	505	1,042	584	608	1,293	716	859	1,678
Total	8,878	23,356	33,818	8,879	21,720	32,914	9,701	22,486	34,053

* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

(3) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed, regardless of the time frame in which they were reported to the API.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15a

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1970(3) Exploratory	1970(3) Development	1970(3) Total(1)	1971 Exploratory	1971 Development	1971 Total(1)	1972 Exploratory	1972 Development	1972 Total(1)
Alabama	30	16	46	55	21	79	87	32	119
Alaska	30	45	77	5	28	33	12	13	30
Offshore*	1	16	19	--	1	1	--	4	7
Arizona	9	3	13	10	4	15	13	10	23
Arkansas	87	230	328	93	235	351	98	240	344
California	243	1,791	2,316	221	1,591	2,095	193	1,202	1,674
Offshore*	15	117	144	15	56	76	4	55	80
Colorado	461	249	710	605	385	990	473	501	975
Florida	13	16	29	18	22	42	39	67	109
Georgia	3	--	3	1	--	1	2	--	2
Idaho	--	--	--	--	--	--	1	--	1
Illinois	198	482	753	152	406	622	157	453	655
Indiana	149	143	307	110	101	228	130	138	284
Iowa	3	--	5	1	--	1	--	--	--
Kansas	882	1,642	2,574	735	1,603	2,398	773	1,645	2,498
Kentucky	234	594	892	213	557	829	217	541	817
Louisiana	669	2,376	3,084	830	2,198	3,078	731	2,481	3,244
Offshore*	150	788	953	274	564	861	200	797	1,008
Maryland	--	--	--	--	--	--	1	--	1
Michigan	152	126	281	162	141	306	182	127	317
Mississippi	232	310	563	213	287	524	237	184	455
Missouri	4	10	15	7	7	15	3	--	4
Montana	307	148	473	323	134	485	430	287	733
Nebraska	167	83	251	130	83	215	185	90	275
Nevada	2	--	9	6	--	6	2	--	2
New Mexico	159	580	774	158	696	867	200	864	1,093
New York	11	88	110	10	90	129	14	115	144
North Carolina	--	--	--	12	--	12	2	--	2
North Dakota	87	57	145	98	60	158	60	33	94
Ohio	85	1,310	1,346	41	1,210	1,256	64	1,484	1,548
Oklahoma	452	2,135	2,783	430	1,815	2,444	400	1,888	2,502
Oregon	--	--	--	2	--	2	--	--	--
Pennsylvania	43	664	759	21	719	786	83	946	1,100
South Dakota	64	1	65	24	8	32	18	1	19
Tennessee	50	48	98	113	57	170	68	27	95
Texas	2,022	5,681	8,130	1,848	5,427	7,737	2,077	5,839	8,365
Offshore*	49	8	57	31	7	38	52	6	58
Utah	46	40	87	61	36	98	77	76	153
Virginia	--	--	--	--	7	7	1	15	16
Washington	--	--	12	--	--	--	--	--	--
West Virginia	88	998	1,111	66	696	768	89	576	669
Wyoming	504	872	1,393	357	513	903	432	508	1,058
Total	7,436	20,737	29,542	7,131	19,137	27,682	7,551	20,383	29,420

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* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15b

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1973			1974			1975		
	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	72	39	111	48	38	86	76	53	130
Alaska	13	19	33	12	27	39	24	41	69
Offshore*	3	6	10	--	11	11	1	13	14
Arizona	2	8	10	1	1	2	1	--	2
Arkansas	79	206	292	91	231	325	77	245	330
California	202	1,073	1,393	253	1,915	2,397	213	2,028	2,694
Offshore*	2	50	65	5	67	79	5	56	66
Colorado	462	478	945	374	537	919	405	762	1,172
Florida	34	23	60	28	11	40	34	17	52
Georgia	4	--	4	5	--	5	3	--	3
Idaho	5	--	5	2	--	2	1	--	1
Illinois	213	386	656	225	577	855	258	764	1,129
Indiana	139	100	259	168	208	389	156	217	400
Iowa	--	--	--	2	--	2	--	--	--
Kansas	754	1,416	2,244	855	1,913	2,960	909	2,444	3,728
Kentucky	165	458	652	197	508	759	341	631	1,013
Louisiana	678	2,015	2,719	652	2,120	2,833	722	2,322	3,105
Offshore*	202	548	760	149	452	620	147	525	679
Maryland	--	--	1	1	--	1	1	--	3
Michigan	191	113	307	264	165	441	282	249	536
Mississippi	209	145	367	288	148	440	260	183	454
Missouri	11	2	13	20	7	96	19	6	95
Montana	448	233	685	420	369	792	355	503	858
Nebraska	102	67	176	167	91	263	206	133	347
Nevada	--	--	--	2	--	2	5	--	5
New Mexico	191	849	1,083	215	963	1,193	162	974	1,173
New York	21	177	222	53	264	373	35	538	610
North Carolina	7	--	7	3	--	3	1	--	1
North Dakota	71	51	129	76	68	145	105	100	205
Ohio	160	1,563	1,724	134	1,414	1,552	157	1,400	1,558
Oklahoma	353	2,000	2,470	399	2,846	3,386	411	3,404	3,960
Pennsylvania	94	1,151	1,299	124	1,303	1,559	88	1,116	1,270
South Dakota	16	1	17	11	2	17	24	3	27
Tennessee	68	29	99	117	64	181	169	63	232
Texas	2,416	5,906	8,656	3,141	6,881	10,321	3,291	9,588	13,276
Offshore*	69	11	80	157	8	166	150	15	166
Utah	77	131	208	55	153	211	64	129	196
Virginia	4	17	20	8	37	45	8	28	36
West Virginia	109	749	858	81	657	741	95	661	772
Wyoming	102	516	938	463	550	1,026	473	822	1,327
N. Gulf of Mexico(2)	--	--	--	14	--	14	33	1	34
Total	7,771	19,921	28,662	8,969	24,068	34,515	9,459	27,425	40,804

* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

(2) Northern Gulf of Mexico was a new area designated in 1972 by the Bureau of Land Management for federally controlled Outer Continental Shelf Waters not previously mapped or leased.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15c

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1976			1977			1978		
	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	54	62	116	47	88	136	60	101	161
Alaska	6	54	77	21	48	73	12	55	76
Offshore*	--	13	18	3	12	19	2	7	11
Arizona	2	--	2	2	2	4	--	8	8
Arkansas	80	348	438	82	399	491	95	347	450
Atlantic Coast	--	--	--	--	--	1	7	--	7
California	257	2,161	2,808	275	1,938	2,553	359	1,639	2,485
Offshore*	7	21	28	17	39	63	15	65	85
Colorado	389	762	1,152	392	791	1,212	449	701	1,156
Florida	9	16	26	14	15	32	15	11	29
Georgia	3	--	3	--	--	--	1	--	1
Idaho	2	--	2	1	--	1	7	--	7
Illinois	226	1,058	1,484	238	851	1,143	277	855	1,202
Indiana	196	291	509	276	337	621	268	401	685
Iowa	--	--	--	1	--	1	--	--	--
Kansas	893	2,646	3,705	1,043	2,899	4,060	1,181	3,312	4,576
Kentucky	425	742	1,189	368	688	1,075	353	657	1,077
Louisiana	607	2,719	3,373	640	2,753	3,439	782	3,001	3,817
Offshore*	94	473	572	138	634	785	121	594	723
Maryland	--	2	3	--	--	3	--	--	3
Mass.-Offshore	--	--	1	--	--	--	--	--	--
Michigan	294	213	530	297	243	545	267	257	539
Mississippi	265	233	504	272	255	539	241	248	496
Missouri	9	13	44	8	4	53	6	26	49
Montana	362	409	773	273	400	679	324	453	778
Nebraska	193	119	312	235	186	425	265	183	451
Nevada	8	--	8	12	6	18	14	7	22
New Jersey	--	--	1	--	--	--	--	--	--
New Mexico	162	859	1,042	180	1,210	1,407	205	1,375	1,625
New York	40	419	519	49	345	485	45	330	427
North Carolina	--	--	1	--	--	--	--	--	--
North Dakota	122	122	245	111	131	242	162	178	341
Ohio	133	2,071	2,205	81	2,685	2,768	77	3,254	3,333
Oklahoma	452	4,104	4,741	490	4,821	5,344	495	5,641	6,164
Oregon	--	--	--	2	--	2	--	--	--
Pennsylvania	67	1,212	1,316	116	1,433	1,569	94	2,013	2,182
South Dakota	29	6	36	20	23	43	21	29	50
Tennessee	153	46	199	177	110	287	149	115	264
Texas	3,276	9,335	12,982	3,726	10,898	15,114	4,085	11,260	15,863
Offshore*	174	130	304	131	180	311	160	147	307
Utah	41	87	131	103	184	305	80	186	268
Virginia	3	8	11	9	16	25	5	26	31
Washington	3	--	3	--	--	--	--	--	--
West Virginia	114	875	1,035	115	1,112	1,267	151	1,352	1,537
Wyoming	415	630	1,059	440	827	1,281	470	996	1,489
N. Gulf of Mexico(2)	27	1	28	17	17	34	4	14	18
TOTAL	9,317	31,623	42,614	10,140	35,715	47,308	11,030	39,031	51,671

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* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

(2) Northern Gulf of Mexico was a new area designated in 1972 by the Bureau of Land Management for federally controlled Outer Continental Shelf Waters not previously mapped or leased.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15d

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1979 Exploratory	1979 Development	1979 Total(1)	1980 Exploratory	1980 Development	1980 Total(1)	1981 Exploratory	1981 Development	1981 Total(1)
Alabama	101	118	219	77	119	196	75	142	222
Alaska	14	71	96	16	108	125	20	146	172
Offshore*	2	5	8	--	5	6	--	4	5
Arizona	2	1	4	6	--	6	8	5	14
Arkansas	105	393	504	111	496	612	154	723	889
Atlantic Coast(2)	18	--	18	4	--	4	5	--	5
California	395	1,592	2,340	443	2,072	3,039	538	2,593	3,838
Offshore*	8	85	123	7	77	137	7	148	193
Colorado	456	607	1,069	553	857	1,414	849	1,122	1,977
Florida	11	20	32	8	11	21	10	15	25
Georgia	--	--	--	1	--	1	2	--	2
Idaho	3	--	3	5	--	5	5	--	5
Illinois	284	967	1,327	487	1,828	2,482	736	2,550	3,436
Indiana	183	302	494	327	406	751	347	460	828
Kansas	1,022	3,338	4,436	1,237	4,923	6,266	1,848	6,452	8,551
Kentucky	423	709	1,195	619	1,463	2,171	870	2,030	3,062
Louisiana	665	3,358	4,063	808	4,223	5,147	971	4,362	5,503
Offshore*	123	598	723	146	493	644	176	503	680
Maryland	--	--	--	1	--	1	1	--	1
Michigan	255	264	538	316	345	676	402	362	787
Mississippi	242	281	534	310	360	680	357	431	788
Missouri	15	56	85	22	143	266	78	189	397
Montana	349	471	822	382	507	902	521	744	1,289
Nebraska	265	184	450	252	260	514	279	327	608
Nevada	11	--	12	20	1	21	28	2	34
New Mexico	212	1,396	1,656	273	1,793	2,126	358	2,099	2,527
New York	60	437	513	59	436	507	79	492	578
North Carolina	--	--	--	--	--	--	--	--	--
North Dakota	175	265	440	256	360	619	461	417	879
Ohio	114	3,532	3,657	66	5,023	5,093	151	5,926	6,082
Oklahoma	479	6,477	6,980	554	9,568	10,158	733	12,357	13,125
Oregon	17	4	21	32	9	41	20	--	20
Offshore*	--	--	--	--	--	--	--	--	--
Pennsylvania	105	2,068	2,295	255	2,833	3,261	342	3,517	3,962
South Dakota	32	17	49	33	41	75	47	43	90
Tennessee	163	185	348	293	257	550	333	295	628
Texas	3,910	11,414	15,810	4,354	15,172	20,038	5,688	20,291	26,442
Offshore*	123	87	210	113	132	245	125	114	239
Utah	89	187	284	112	177	291	208	347	555
Virginia	4	21	25	2	25	27	6	26	32
Washington	--	--	6	2	--	3	--	--	--
Offshore*	--	--	--	--	--	--	--	--	--
West Virginia	124	1,445	1,612	119	1,752	1,924	170	1,948	2,170
Wyoming	411	963	1,392	435	1,037	1,518	708	1,289	2,043
N. Gulf of Mexico	18	12	30	16	11	27	22	12	34
Alaska(2)	3	--	3	4	--	4	--	--	--
Pacific Coast(2)	--	--	--	--	--	--	--	--	--
Total	10,735	41,155	53,362	12,870	56,616	71,562	17,430	71,804	91,600

* Included in state total

(1) Includes service wells, stratigraphic and core tests.

(2) Alaska (offshore federal waters), Atlantic Coast and Pacific Coast were mapped and released by the Bureau of Land Management as of January 1, 1979.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

	1982			1983			1984		
STATE/AREA	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	79	133	214	84	133	217	121	262	383
Alaska	10	200	227	3	157	163	10	165	186
Offshore*	--	8	11	0	6	6	0	2	2
Arizona	7	1	14	11	1	12	2	0	2
Arkansas	128	680	825	154	723	900	133	739	897
Atlantic Coast(3)	7	--	7	1	0	1	3	0	3
California	468	2,107	3,097	195	2,143	2,733	204	3,276	3,898
Offshore*	16	175	231	16	77	103	13	104	132
Colorado	653	1,173	1,832	504	978	1,484	579	1,221	1,806
Florida	12	9	21	13	7	20	12	12	24
Georgia	1	--	1	0	0	0	3	0	3
Idaho	6	--	6	4	0	4	3	0	3
Illinois	695	2,433	3,253	729	2,181	3,035	699	2,194	2,941
Indiana	451	571	1,051	453	534	1,022	404	523	990
Kansas	1,838	6,491	8,561	1,718	5,342	7,256	2,346	4,088	6,550
Kentucky	1,119	2,583	3,804	1,375	2,721	4,232	972	2,781	3,844
Louisiana	801	4,244	5,117	592	4,359	5,048	763	6,001	6,891
Offshore*	157	432	589	114	685	801	197	704	901
Maryland	0	0	0	0	0	0	2	0	2
Michigan	449	435	900	302	457	772	536	568	1,121
Mississippi	268	316	584	252	298	550	282	332	615
Missouri	79	104	305	43	133	243	28	85	260
Montana	275	536	816	181	326	511	251	557	820
Nebraska	197	212	414	187	181	369	180	186	377
Nevada	11	--	13	7	1	8	32	5	37
New Mexico	314	1,733	2,100	192	1,301	1,527	225	1,398	1,668
New York	44	623	668	41	370	413	30	579	609
North Carolina	0	0	0	1	0	1	1	0	1
North Dakota	371	325	696	211	278	489	279	421	700
Ohio	180	4,618	4,814	114	4,150	4,288	108	4,818	4,958
Oklahoma	707	10,660	11,390	567	8,340	8,943	515	8,990	9,579
Oregon	8	0	8	0	0	0	1	0	1
Offshore*	0	0	0	0	0	0	0	0	0
Pennsylvania	165	3,168	3,399	92	2,324	2,465	102	3,358	3,533
South Carolina	0	0	0	0	0	0	1	0	1
South Dakota	33	20	53	34	18	52	16	28	44
Tennessee	413	214	627	328	189	517	164	202	366
Texas	5,077	19,707	25,439	4,525	18,897	24,089	5,111	21,810	27,696
Offshore*	141	99	240	109	53	162	111	78	189
Utah	149	313	482	132	283	415	112	380	493
Virginia	26	71	97	14	21	35	3	64	67
Washington	5	0	8	1	0	5	1	0	7
Offshore*	0	0	0	0	0	0	0	0	0
West Virginia	156	1,921	2,114	60	1,536	1,619	37	1,846	1,919
Wyoming	537	1,124	1,719	473	997	1,508	607	1,142	1,804
N. Gulf of Mexico(2)	22	26	48	13	42	55	57	26	83
Pacific Coast(3)	4	0	4	22	0	22	12	0	12
Alaska(3)	1	0	1	0	0	0	2	0	2
Total	15,766	66,751	84,729	13,627	59,421	75,032	14,949	68,057	85,196

* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute, Quarterly Completion Reports.

Section III
Table 15f

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1985 Exploratory	1985 Development	1985 Total(1)	1986 Exploratory	1986 Development	1986 Total(1)	1987 Exploratory	1987 Development	1987 Total(1)
Alabama	143	217	360	77	143	220	68	118	186
Alaska	5	98	104	2	176	184	3	87	93
Offshore*	0	6	6	0	8	8	0	3	5
Arizona	2	1	3	6	0	6	4	0	4
Arkansas	122	875	1,018	85	399	484	90	321	411
California	201	3,122	3,599	142	1,993	2,252	159	2,157	2,460
Offshore*	4	84	92	0	41	41	6	36	42
Colorado	563	966	1,551	285	742	1,029	256	625	885
Florida	10	11	21	6	8	14	4	5	9
Georgia	1	0	1	2	0	2	1	0	1
Idaho	3	0	3	4	0	4	1	0	1
Illinois	537	1,840	2,381	307	1,021	1,343	224	971	1,293
Indiana	403	540	972	152	272	443	143	178	335
Iowa	1	0	1	3	0	3	1	0	1
Kansas	1,503	3,986	5,584	1,110	2,029	3,146	1,250	1,950	3,206
Kentucky	635	1,976	2,643	196	814	1,016	113	611	739
Louisiana	621	4,754	5,450	427	2,238	2,669	350	1,985	2,335
Offshore*	165	481	647	146	344	493	125	308	433
Maryland	0	0	0	1	0	1	1	0	1
Michigan	454	394	863	259	265	541	274	251	535
Mississippi	260	312	572	109	185	295	118	198	317
Missouri	15	62	84	5	5	10	6	12	18
Montana	222	385	609	143	205	348	99	188	298
Nebraska	160	114	277	85	55	156	126	65	202
Nevada	25	9	34	20	0	20	13	2	15
New Mexico	288	1,434	1,743	157	760	934	156	623	797
New York	18	418	436	11	246	257	9	208	217
North Dakota	219	278	497	126	93	219	98	87	185
Ohio	84	3,652	3,743	31	1,906	1,946	38	1,622	1,660
Oklahoma	406	7,133	7,617	219	4,315	4,570	239	3,474	3,771
Oregon	3	2	5	8	2	10	6	4	10
Offshore*	0	0	0	0	0	0	0	0	0
Pennsylvania	60	2,718	2,806	24	1,234	1,258	21	1,068	1,090
South Dakota	16	31	49	17	0	17	9	6	15
Tennessee	117	120	237	57	125	182	29	124	153
Texas	4,174	19,225	24,291	2,520	10,253	13,253	2,216	8,581	11,162
Offshore*	118	98	216	50	52	102	55	40	95
Utah	54	302	359	37	159	198	47	72	122
Virginia	3	85	88	7	132	139	2	18	20
Washington	2	2	4	0	0	0	1	0	1
West Virginia	35	1,393	1,432	15	872	887	21	826	847
Wyoming	552	918	1,533	363	452	830	326	438	797
N. Gulf of Mexico	95	29	124	61	49	110	43	26	69
Pacific Coast	4	0	4	4	4	8	0	6	6
Alaska	10	0	10	4	2	6	0	1	1
TOTAL	12,026	57,402	71,108	7,087	31,154	39,010	6,566	26,908	34,269

* Included in state total.
(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1987.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1988 Exploratory	 Development	 Total(1)
Alabama	100	97	197
Alaska	3	84	92
Offshore*	0	3	3
Arizona	1	0	1
Arkansas	55	314	369
California	97	1,538	1,819
Offshore*	3	30	34
Colorado	243	594	837
Florida	6	2	8
Georgia	2	0	2
Idaho	2	0	2
Illinois	180	661	937
Indiana	84	95	186
Iowa	1	0	1
Kansas	957	1,477	2,435
Kentucky	74	332	409
Louisiana	301	1,450	1,752
Offshore*	149	191	340
Maryland	1	1	2
Michigan	224	290	517
Mississippi	131	191	322
Missouri	7	2	9
Montana	124	189	319
Nebraska	83	37	121
Nevada	13	2	15
New Mexico	104	635	748
New York	5	86	91
North Dakota	114	105	220
Ohio	13	472	485
Oklahoma	201	2,390	2,629
Oregon	11	4	18
Offshore*	0	0	0
Pennsylvania	21	457	478
South Dakota	6	5	11
Tennessee	8	61	69
Texas	1,780	6,681	8,776
Offshore*	81	29	110
Utah	36	66	102
Virginia	4	21	25
Washington	3	0	3
West Virginia	5	493	498
Wyoming	277	293	585
N. Gulf of Mexico	68	22	90
Pacific Coast	1	5	6
Alaska	0	0	0
TOTAL	5,346	19,152	25,186

* Included in state total.

(1) Includes service wells and stratigraphis and cores tests.

Source: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1988.

U.S. ROTARY RIG CENSUS

Year	Number of Rigs	Contractor Owned	Oil Company Owned	Stacked	Active	DRILLING DEPTH CAPABILITIES (Thousand Feet) 0-5	6-9	10-12	13-15	16-Over	Total Land Rigs	Drilling Barges	Offshore Rigs
1967(1)	2,408	2,359	49	835	1,573	623	776	435	199	375	2,114	121	173
1968	2,111	2,067	44	603	1,508	493	680	381	185	372	1,825	114	172
1969	2,060	2,033	27	411	1,649	528	626	352	188	366	1,827	98	135
1970	1,898	1,869	29	567	1,331	434	580	322	219	343	1,662	106	130
1971	1,859	1,832	27	551	1,308	436	535	329	198	361	1,592	124	143
1972	1,768	1,741	27	387	1,381	409	490	301	171	397	1,551	77	140
1973	1,767	1,739	28	294	1,473	355	517	318	164	413	1,570	71	126
1974	1,894	1,881	13	125	1,769	387	529	339	214	425	1,715	66	113
1975	2,028	2,015	14	151	1,877	396	579	380	225	558	1,839	74	115
1976	2,204	2,180	24	225	1,979	468	633	366	239	498	1,964	76	164
1977	2,482	2,451	31	83	2,399	542	628	461	274	577	2,186	77	219
1978	2,851	2,818	33	66	2,785	557	723	565	313	693	2,524	91	236
1979	3,182	3,144	38	308	2,874	546	783	631	350	872	2,802	109	271
1980	3,672	3,626	46	130	3,542	605	885	704	419	1,059	3,255	115	302
1981	4,803	4,762	41	100	4,703	773	1,080	950	595	1,405	4,316	161	326
1982	5,644	5,606	38	2,419	3,225	821	1,285	1,104	717	1,717	5,139	157	348
1983	5,273	5,241	32	2,734	2,539	746	1,233	993	662	1,639	4,832	128	313
1984	4,580	4,553	27	1,490	3,090	571	1,077	933	591	1,408	4,102	131	347
1985	4,409	4,386	23	1,784	2,625	529	1,084	894	570	1,332	3,940	121	348
1986	3,993	3,961	32	2,941	1,052	517	971	789	496	1,220	3,573	90	330
1987	3,331	3,299	32	1,943	1,388	435	841	637	427	991	2,956	91	284

(1) Data for prior years not available on a comparable basis.

Source: Reed Tool Company, Annual Rotary Rig Census (taken in August of each year and published in the October issue of World Oil Magazine).

Section III
Table 17

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	--	--	--	--	--	--	--	--	--	--	--	--	4	4
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	2	2
Arizona	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Arkansas	160	165	168	179	190	200	230	240	240	255	260	300	320	370
California	350	365	395	440	360	380	420	460	470	465	500	535	569	652
Colorado	20	30	30	36	35	40	55	75	100	150	240	250	318	466
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	100	100	100	90	50	40	25	25	30	40	40	35	35	45
Indiana	830	800	750	750	650	600	450	425	400	405	410	380	350	350
Kansas	2,700	3,000	3,300	3,700	4,000	4,270	4,600	4,800	5,100	5,450	5,650	6,000	5,700	6,003
Kentucky	3,350	3,480	3,610	3,500	3,570	3,800	3,900	4,000	4,100	4,200	4,300	4,330	4,690	4,829
Louisiana	2,100	2,210	2,400	2,550	2,690	2,900	3,200	3,500	3,600	4,000	4,300	4,500	5,000	6,479
Maryland	--	--	--	--	--	--	--	--	--	--	--	--	38	38
Michigan	760	700	650	550	400	380	280	250	260	260	270	270	230	154
Mississippi	60	75	75	140	190	220	220	235	230	235	238	250	300	400
Missouri	100	100	90	59	30	20	27	37	32	33	38	40	--	9
Montana	700	760	800	820	830	920	1,000	1,050	1,060	1,065	1,090	1,090	1,176	999
Nebraska	--	--	--	--	--	--	--	--	--	--	--	--	50	53
New Mexico	220	230	270	360	570	920	1,500	1,800	2,200	2,830	3,300	4,000	5,000	6,047
New York	1,700	1,600	1,400	1,400	1,380	1,360	1,300	1,250	1,180	1,160	1,150	980	920	1,000
North Dakota	--	--	--	--	--	--	--	--	--	--	--	--	28	28
Ohio	7,190	7,000	6,700	6,800	6,300	6,000	6,100	6,100	6,200	6,300	6,450	6,300	6,700	7,063
Oklahoma	3,250	3,400	3,500	3,600	3,600	3,700	3,900	4,000	4,200	4,300	4,450	5,000	5,300	5,800
Pennsylvania	19,100	18,800	18,400	18,500	17,700	16,700	16,700	16,500	16,300	16,250	16,300	16,300	16,500	16,350
South Dakota	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tennessee(1)	--	18	18	18	20	20	27	28	28	28	30	30	25	30
Texas	5,000	5,100	5,800	7,300	8,300	9,200	10,200	11,200	11,400	12,240	13,400	15,340	16,750	18,612
Utah	--	--	--	--	--	--	--	--	--	--	--	--	37	35
Virginia	--	--	--	--	--	--	--	--	--	--	--	--	53	92
West Virginia	15,800	16,100	15,500	13,900	14,000	13,500	13,800	13,900	14,000	14,200	14,200	14,000	12,740	14,500
Wyoming	150	145	150	165	165	180	180	200	220	265	280	300	390	350
Other	30	34	40	43	70	100	109	117	125	130	145	170	--	--
Total	63,670	64,212	64,146	64,900	65,100	65,450	68,233	70,192	71,475	74,261	77,041	80,400	83,225	90,761

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(1) Prior to 1948 included with Kentucky.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section III
— Table 17a

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Alabama	--	--	2	--	--	--	--	1	1	2	--	15	15	6
Alaska	5	8	10	13	11	19	21	18	44	51	40	50	52	52
Arizona	--	3	7	10	8	9	7	4	4	4	5	4	4	1
Arkansas	485	480	490	515	744	818	909	947	998	1,008	1,013	1,041	876	1,172
California	774	826	879	950	1,033	1,068	1,059	994	897	980	962	1,086	1,095	1,142
Colorado	462	451	501	560	701	826	827	810	805	861	928	934	1,050	1,347
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	74	30	25	25	25	3	3	5	5	8	14	31	36	37
Indiana	300	290	285	280	275	275	271	265	263	50	83	87	106	474
Kansas	6,633	6,915	7,050	7,174	7,200	8,608	8,603	8,509	8,567	8,660	8,585	8,621	8,785	8,800
Kentucky	5,119	5,200	5,210	5,320	6,100	6,020	6,215	6,290	6,413	6,913	7,413	7,099	7,224	7,307
Louisiana	6,990	7,442	7,859	8,260	8,563	8,977	9,036	9,163	9,354	9,690	9,748	9,456	10,551	9,248
Maryland	34	33	33	16	20	8	13	15	13	16	14	16	15	15
Michigan	155	174	175	195	226	250	244	199	211	1,235	1,171	1,317	1,145	503
Mississippi	472	490	450	435	370	376	360	347	322	325	400	252	250	239
Missouri	9	6	6	6	11	11	11	11	11	11	2	3	2	3
Montana	981	954	905	869	784	784	648	1,196	1,098	739	1,056	1,116	1,118	1,450
Nebraska	49	47	44	41	39	37	37	36	35	35	29	29	29	25
New Mexico	6,491	6,967	7,150	7,306	8,010	8,017	8,274	8,754	9,100	8,848	9,388	9,679	9,711	9,915
New York	1,109	1,130	1,130	1,155	1,150	1,164	1,159	1,155	818	600	600	650	789	700
North Dakota	28	29	31	31	31	31	31	19	33	29	29	21	44	34
Ohio	7,077	7,117	7,128	7,160	7,100	3,790	3,865	7,211	7,334	7,789	8,179	8,630	9,406	10,038
Oklahoma	6,218	6,324	6,639	6,813	7,447	7,841	7,726	8,337	8,432	8,168	8,507	8,457	8,868	9,401
Pennsylvania	16,500	16,600	16,600	14,120	17,516	17,808	17,700	17,000	16,600	16,239	16,586	16,600	16,600	17,123
South Dakota	--	--	--	--	--	--	--	--	--	--	--	5	10	20
Tennessee	23	30	30	30	20	20	21	23	26	15	20	45	6	13
Texas	19,831	20,834	22,016	22,995	23,748	23,907	23,760	23,805	23,689	23,417	23,280	23,373	23,805	24,646
Utah	135	121	135	135	148	156	168	165	171	173	178	200	158	114
Virginia	98	98	98	100	99	104	104	111	111	115	115	130	178	174
West Virginia	16,297	17,121	17,500	17,960	19,600	20,830	20,500	18,214	18,600	20,702	21,025	21,324	21,400	21,450
Wyoming	460	547	578	610	701	741	749	787	521	800	840	887	850	900
Total	96,809	100,267	102,966	103,084	111,680	112,498	112,321	114,391	114,476	117,483	120,210	121,158	124,178	126,349

Source: U.S. Bureau of Mines, Natural Gas Annuals

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	45	66	69	189	250	314	385	489	461	690	863	1,029	1,135
Alaska	61	50	50	52	58	71	79	97	78	81	84	85	85
Arizona	1	1	1	1	1	1	1	1	1	1	1	1	0
Arkansas	1,128	1,223	1,253	1,335	1,402	1,114	1,600	1,959	1,763	2,371	2,623	2,719	2,847
California	1,585	1,123	1,050	1,131	1,117	1,125	1,110	1,352	1,413	1,469	1,566	1,316	1,294
Colorado	1,380	1,500	2,053	2,318	2,574	2,997	3,543	4,008	4,391	4,549	4,401	4,398	4,530
Illinois	41	34	34	51	51	70	70	57	64	81	123	152	169
Indiana	478	563	596	641	655	698	720	736	737	758	1,272	1,289	1,298
Kansas	8,865	9,330	9,375	9,450	10,544	12,820	15,550	13,800	14,100	4,925	15,980	11,485	13,631
Kentucky	7,386	7,505	7,649	7,776	7,883	7,984	8,151	8,219	8,532	8,798	9,285	9,747	10,366
Louisiana	11,359	11,370	12,484	13,333	14,464	16,190	17,048	16,586	16,700	17,124	16,716	15,313	15,890
Maryland	15	14	12	12	12	9	10	8	8	9	7	6	8
Michigan	209	214	212	376	376	423	448	484	414	535	655	651	722
Mississippi	248	257	365	402	433	447	470	596	552	683	710	414	775
Missouri	3	3	7	7	0	0	0	0	0	4	4	9	3
Montana	1,235	1,490	1,438	1,755	1,881	1,881	2,140	2,111	2,133	2,153	2,260	2,799	2,349
Nebraska	19	17	18	22	20	22	25	23	23	23	19	16	20
New Mexico	10,352	10,674	11,812	12,609	13,598	14,571	15,560	16,967	17,547	17,806	18,308	18,647	18,806
New York	900	1,400	1,600	1,900	2,200	2,076	2,636	2,969	3,423	3,500	4,500	4,947	5,167
North Dakota	18	34	34	23	78	80	65	66	51	55	62	61	61
Ohio	10,382	11,509	13,032	14,197	15,827	17,251	19,405	22,112	25,762	28,657	31,343	32,721	33,616
Oklahoma	9,769	10,436	11,570	12,861	14,417	16,419	18,451	20,742	22,230	3,691	24,756	25,762	26,595
Oregon	0	0	0	0	5	5	9	6	8	6	9	14	10
Pennsylvania	17,300	17,500	17,396	18,900	19,800	19,900	21,500	23,000	24,000	25,500	26,500	27,600	27,800
South Dakota	20	20	20	20	10	13	39	38	40	42	44	44	52
Tennessee	5	7	49	75	184	177	255	340	540	780	988	921	840
Texas	26,184	27,762	31,512	33,157	35,650	37,724	40,612	44,130	44,699	45,139	44,320	42,713	43,375
Utah	271	71	535	171	182	200	226	282	322	700	755	594	645
Virginia	186	180	202	227	258	258	288	298	299	425	495	573	689
West Virginia	21,700	22,100	22,600	23,575	24,725	25,900	27,200	27,450	29,675	31,150	32,475	33,400	34,300
Wyoming	950	990	995	888	1,236	1,264	1,243	1,827	1,986	2,148	2,220	2,101	2,147
Total	132,095	137,443	148,018	157,454	169,891	182,004	198,839	210,753	221,952	233,853	243,344	241,527	249,225

(1) Included in other.
(2) Includes offshore wells in state waters only.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

Section III
Table 18

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Alabama	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	221
Alaska	--	--	--	--	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--	--	--	--	--
Arkansas	3,590	3,670	3,660	3,700	3,800	3,930	4,190	4,410	4,610	5,225	5,680
California	24,420	26,460	24,350	28,080	29,630	30,900	31,920	32,860	34,760	35,990	37,020
Colorado	600	700	750	770	840	1,000	1,220	1,750	1,940	2,150	2,185
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	11
Illinois	25,670	26,500	27,100	27,500	27,420	27,460	29,520	30,280	29,600	31,400	31,585
Indiana	2,300	2,780	2,950	3,410	3,600	3,840	4,020	4,160	4,080	4,405	4,515
Kansas	27,500	27,900	29,600	31,000	32,460	33,620	35,420	37,755	36,177	37,570	38,330
Kentucky	14,780	14,750	15,500	15,650	16,900	16,950	16,600	16,900	17,800	18,660	18,260
Louisiana	8,700	9,770	10,890	11,860	12,490	13,290	14,220	15,980	18,800	20,905	21,945
Michigan	3,540	3,550	3,820	3,950	3,800	3,980	4,000	4,173	4,034	4,191	3,995
Mississippi	1,120	1,320	1,400	1,670	1,760	1,870	1,950	2,173	2,339	2,374	2,313
Missouri	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	107
Montana	2,890	3,100	3,180	3,300	3,380	3,510	3,410	3,415	3,414	3,584	3,792
Nebraska	60	50	60	140	260	300	350	550	790	825	1,030
Nevada	--	--	--	--	--	--	(1)	--	--	--	2
New Mexico	5,000	5,370	5,580	6,020	6,350	6,790	7,320	7,760	8,640	9,415	10,820
New York	22,500	23,100	23,000	23,200	23,200	22,950	22,730	22,390	20,100	19,670	19,695
North Dakota	--	--	--	(1)	(1)	83	257	460	570	789	920
Ohio	19,500	20,000	19,900	18,580	17,650	17,600	15,670	14,110	14,195	14,385	14,490
Oklahoma	52,200	53,000	54,400	56,800	57,600	60,320	63,400	65,390	69,930	70,075	74,425
Pennsylvania	83,600	82,000	82,100	81,190	78,800	80,600	79,430	73,700	72,525	71,080	69,610
South Dakota	--	--	--	--	--	--	(1)	(1)	(1)	(1)	3
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	35
Texas	107,600	113,100	119,900	128,500	134,670	139,530	143,990	153,190	159,880	178,095	187,935
Utah	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	225
Virginia	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	4
West Virginia	16,250	16,000	15,400	15,000	14,500	13,900	13,460	12,900	12,500	12,770	12,715
Wyoming	4,320	4,600	4,950	5,320	5,610	5,800	5,530	6,530	6,960	7,190	7,405
Other	140	160	190	230	270	297	333	364	366	422	--
Total	426,280	437,880	448,680	465,870	474,990	488,520	498,940	511,200	524,010	551,170	569,273

(1) Included in Other.

Source: U.S. Bureau of Mines, Annual Petroleum Statements

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Ala.	281	334	380	418	449	502	519	518	524	532	546	550
Ak.	2	5	17	45	52	54	56	57	72	94	163	183
Ariz.	1	2	3	5	4	9	8	10	6	20	22	29
Ark.	5,715	6,155	6,381	6,330	5,918	6,010	6,018	6,014	6,372	6,459	6,445	6,118
Ca.	36,285	36,915	37,771	38,184	39,265	40,233	40,916	41,031	41,348	41,608	41,360	40,997
Co.	2,195	2,089	2,021	2,023	2,110	2,030	1,981	1,938	2,371	1,730	1,825	1,811
Fla.	11	11	11	11	11	12	19	38	42	41	44	45
Ill.	31,775	31,826	31,995	31,911	30,174	30,149	29,500	29,017	28,608	27,887	27,236	26,733
Ind.	4,865	5,050	5,176	5,679	5,607	5,951	5,381	5,275	5,300	4,831	4,330	4,094
Kn.	37,880	40,175	40,460	40,933	46,750	46,951	46,715	47,354	46,016	47,597	45,145	44,665
Ky.	18,965	21,165	20,571	19,857	19,448	14,903	15,226	15,600	14,800	13,255	12,311	11,843
La.	23,070	23,468	24,682	24,740	26,382	27,638	29,452	30,179	31,063	30,670	30,266	29,393
Mich.	3,895	4,130	4,348	4,301	4,282	4,234	4,151	4,036	4,141	4,004	4,273	3,878
Miss.	2,240	2,403	3,086	2,819	2,560	2,682	2,580	2,513	2,549	2,557	2,599	2,548
Mo.	127	121	120	116	105	105	100	142	150	146	128	164
Mt.	3,916	3,888	3,707	3,342	3,692	3,642	3,329	3,799	3,507	3,390	3,385	3,331
Nebr.	1,190	1,461	1,571	1,860	1,764	1,726	1,711	1,611	1,511	1,430	1,403	1,305
Nev.	2	2	2	4	4	4	5	9	10	13	13	11
N.M.	12,045	12,045	14,286	15,295	16,102	16,796	17,570	18,000	16,504	16,745	16,903	17,088
N.Y.	19,530	19,230	18,579	17,829	13,537	13,431	12,526	12,304	11,832	4,712	4,201	5,263
N.D.	1,150	1,390	1,451	1,683	1,794	1,824	1,881	1,983	2,017	2,063	2,075	1,987
Ohio	15,200	16,934	16,743	16,682	16,867	14,605	13,752	13,947	14,192	14,638	15,480	15,737
Ok.	75,210	75,630	77,720	79,387	80,799	81,475	80,511	80,947	80,583	80,970	81,052	80,952
Pa.	68,485	68,450	66,260	63,576	59,673	54,062	53,065	52,731	50,645	45,426	42,500	37,625
S.D.	4	14	19	19	19	24	24	28	29	28	27	26
Tenn.	35	34	27	30	40	39	38	33	32	33	32	35
Tx.	189,960	188,934	192,934	196,396	197,659	198,070	199,119	197,924	196,308	192,001	187,922	183,141
Utah	519	697	796	795	852	835	840	841	867	869	875	843
Va.	6	7	5	5	5	6	8	6	2	4	5	5
W.Va.	12,815	12,780	12,560	12,762	12,880	13,044	13,205	13,225	13,467	12,989	13,049	12,849
Wyo.	7,530	7,090	7,475	7,880	7,581	7,611	8,019	8,093	8,434	8,547	8,305	8,978
Other	1	1	1	--	--	--	--	--	--	--	--	--
Tot.	574,905	583,141	591,158	594,917	596,385	588,657	588,225	589,203	583,302	565,289	553,920	542,227

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section III
Table 18b

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Alabama	562	556	544	586	582	608	633	631	648	660	684	692
Alaska	202	173	193	192	199	205	181	298	348	396	443	700
Arizona	28	30	28	28	25	28	27	29	34	35	31	35
Arkansas	7,082	7,110	7,157	7,232	7,235	7,308	7,529	7,756	7,866	8,115	8,104	8,249
California	40,437	39,668	39,254	38,626	40,479	41,029	42,534	43,525	43,375	43,838	45,086	47,362
Colorado	1,770	1,785	1,897	2,004	2,174	2,450	2,827	3,027	3,260	3,450	3,490	2,898
Florida	60	78	142	147	136	143	143	140	111	115	121	117
Illinois	26,134	25,361	24,716	24,309	23,630	23,373	23,527	23,752	23,900	24,067	24,871	26,100
Indiana	4,055	3,605	4,379	4,323	4,376	4,798	4,891	5,076	5,296	5,452	5,452	5,715
Kansas	43,490	42,180	41,055	41,520	41,755	41,945	42,240	42,450	42,900	43,200	48,037	42,402
Kentucky	11,659	14,657	14,616	14,416	14,127	13,905	13,970	14,046	14,097	14,172	14,539	14,585
Louisiana	27,934	26,829	27,762	27,869	27,973	27,734	26,274	23,881	24,500	24,767	26,014	25,320
Michigan	4,311	4,046	3,685	3,733	4,201	3,655	3,770	3,903	3,890	3,890	4,900	4,417
Mississippi	3,102	3,109	3,195	2,901	2,254	2,237	2,212	2,806	2,956	3,263	3,676	3,154
Missouri	126	139	137	135	157	163	173	175	167	251	258	421
Montana	3,243	3,145	3,544	3,471	3,103	3,247	3,309	3,330	3,400	3,661	3,616	3,968
Nebraska	1,244	1,191	1,143	1,107	1,127	1,190	1,291	1,382	1,469	1,551	1,693	1,870
Nevada	9	6	6	6	9	6	12	18	16	20	20	(1)
New Mexico	17,314	17,210	17,287	17,099	13,304	13,715	13,939	14,338	17,453	21,526	15,103	16,289
New York	5,861	5,860	5,427	5,200	5,475	4,975	5,100	4,800	5,039	5,100	5,220	5,300
N. Dakota	1,457	1,466	1,401	1,404	1,488	1,994	1,568	1,608	2,305	2,624	2,938	2,570
Ohio	15,860	14,771	15,222	15,236	16,658	16,611	16,761	17,338	18,289	19,596	21,132	22,441
Oklahoma	78,019	75,572	73,745	72,880	71,797	71,576	72,543	73,752	75,308	76,505	81,296	82,639
Penn.	36,801	34,019	32,596	31,539	32,095	32,095	28,805	28,400	27,768	27,925	25,991	26,138
S. Dakota	26	33	29	27	31	38	43	69	85	94	97	120
Tennessee	59	78	73	67	154	172	215	283	311	351	435	489
Texas	177,221	172,696	167,233	159,090	159,702	160,603	160,546	163,746	166,365	169,826	175,673	180,627
Utah	889	870	890	989	1,076	1,323	1,188	1,448	1,291	1,560	1,714	1,543
Virginia	5	1	1	--	3	7	7	4	5	7	8	(1)
W. Virginia	12,750	12,112	12,136	13,600	13,650	13,750	13,800	13,900	14,100	14,250	14,425	14,700
Wyoming	9,280	8,952	8,950	7,642	8,656	9,450	9,052	11,123	10,200	11,128	12,648	11,574
Other	--	--	--	--	--	--	--	0	0	0	0	39
Total	530,990	517,318	508,443	497,378	497,631	500,333	499,110	507,034	516,752	531,395	547,717	557,009(2)

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(1) Included in other.
(2) In 1981, total includes 4,535 producing wells in federal waters.

Source: U.S. Energy Information Administration, Annual Petroleum Statements
1981 -- World Oil, Forecast Review Issue, February issue

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1982	1983	1984	1985	1986	1987
Alabama	719	741	759	810	844	875
Alaska	760	672	640	977	1,109	1,216
Arizona	36	34	31	28	NA	NA
Arkansas	8,629	8,370	9,490	9,700	10,047	8,398
California	47,231	47,197	48,541	49,874	43,717	45,694
Colorado	3,113	4,591	5,360	5,457	5,502	5,642
Florida	123	137	138	149	114	122
Illinois	27,600	28,697	30,045	31,100	32,025	32,307
Indiana	6,047	6,465	6,792	7,164	7,610	7,449
Kansas	46,189	49,348	49,198	51,888	48,816	48,051
Kentucky	15,109	15,562	19,980	21,844	22,639	22,974
Louisiana	22,380	23,276	24,508	26,354	29,921	29,758
Michigan	4,536	4,913	4,881	5,143	4,885	4,996
Mississippi	2,640	2,727	2,562	3,468	2,235	2,143
Missouri	499	552	557	581	450	200
Montana	4,311	4,675	4,201	4,196	3,933	4,050
Nebraska	2,006	2,100	2,095	2,091	1,838	1,852
Nevada	(1)	(1)	37	45	NA	NA
New Mexico	16,526	17,409	18,146	18,697	18,409	18,401
New York	5,320	5,432	4,678	4,811	4,632	4,428
North Dakota	2,870	3,734	3,404	3,697	3,543	3,474
Ohio	24,752	26,287	26,878	27,975	29,937	30,013
Oklahoma	91,745	95,868	99,600	102,342	100,261	101,745
Pennsylvania	25,285	24,657	20,739	24,000	20,000	14,271
South Dakota	130	140	138	165	148	149
Tennessee	650	693	775	798	806	648
Texas	187,626	195,595	203,664	209,040	201,272	198,163
Utah	1,583	1,634	1,799	1,944	1,858	1,785
Virginia	(1)	(1)	(1)	28	32	29
West Virginia	14,900	15,300	15,475	15,895	15,750	15,850
Wyoming	11,792	11,349	11,561	12,038	11,879	10,953
Other	50	55	31	0	0	58
Total	580,142(2)	603,290(2)	620,807(2)	646,626(2)	628,690(2)	620,181(2)

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(1) Included in other.

(2) In 1982, total includes 4,985 producing wells in federal waters; in 1983, 4,710; in 1984, 4,104; in 1985, 4,327; in 1986, 4,425; and in 1987, 4,487.

Source: World Oil Magazine, Forecast Review Issue, February.

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1947		1948		1949		1950		1951		1952	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	0	33	0	33	0	39	0	58	0	75	4	92
Alaska	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	378	2,992	340	3,040	291	3,076	361	3,266	312	3,329	350	3,758
California	2,363	22,792	2,136	24,413	2,373	22,127	2,143	25,963	1,934	27,656	1,866	29,005
Colorado	127	411	113	611	87	662	191	572	135	700	85	886
Florida	4	1	5	3	5	6	1	11	1	11	1	11
Illinois	68	28,405	48	30,261	71	31,169	16	33,113	12	32,873	7	33,727
Indiana	2	2,807	18	3,252	35	3,739	12	3,946	18	4,222	22	4,473
Kansas	85	26,846	143	24,975	62	29,033	73	30,093	45	31,215	58	32,018
Kentucky	0	14,509	0	14,554	0	14,895	5	15,260	36	15,524	0	15,806
Louisiana	3,168	4,516	3,367	5,508	3,320	6,689	3,477	7,667	3,417	8,106	3,591	8,770
Michigan	276	3,356	296	3,131	387	3,268	141	3,577	155	3,730	134	3,858
Mississippi	416	636	495	737	476	886	280	1,168	126	1,466	206	1,504
Missouri	0	36	0	48	0	88	0	46	0	43	0	70
Montana	24	2,455	24	3,140	39	2,865	20	3,086	22	3,188	30	3,286
Nebraska	0	55	0	46	0	62	35	107	27	181	2	221
Nevada	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico	3,636	1,395	3,288	2,004	3,014	2,509	3,232	2,597	3,283	2,768	3,462	3,141
New York	0	23,000	0	23,000	0	23,400	0	23,200	0	23,100	0	23,000
North Dakota	0	0	0	0	0	0	0	0	2	0	68	17
Ohio	50	22,825	65	22,945	60	21,740	50	19,750	50	18,450	40	19,410
Oklahoma	1,485	50,405	1,380	51,731	1,426	52,934	1,740	55,086	1,605	56,715	1,485	58,762
Pennsylvania	0	82,800	0	84,000	0	82,100	0	82,200	0	81,200	0	81,200
South Dakota	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee	0	22	0	29	0	35	0	36	0	34	0	35
Texas	37,070	67,909	37,970	71,673	39,203	76,280	41,949	81,322	44,016	86,293	45,784	90,615
Utah	0	0	2	1	22	0	3	30	4	38	10	51
Virginia	0	12	0	15	0	15	0	15	0	15	0	25
Washington	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia	0	17,000	0	16,200	0	15,900	0	15,200	0	14,600	0	14,200
Wyoming	247	3,905	336	4,222	464	4,452	323	4,887	313	5,292	242	4,614
U.S. Total	49,399	379,123	50,036	389,572	51,335	397,969	54,052	412,256	55,513	420,824	57,447	432,375

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1953		1954		1955		1956		1957		1958	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	2	110	5	108	11	102	62	97	35	181	27	227
Alaska	0	0	0	0	0	0	0	0	0	0	1	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	336	3,699	270	3,925	410	4,057	382	4,419	246	5,173	232	5,417
California	1,834	29,950	1,770	31,303	1,759	32,571	1,599	34,625	1,496	35,756	1,290	35,170
Colorado	132	1,098	97	1,633	345	1,784	433	1,724	572	1,612	573	1,625
Florida	0	12	0	13	0	11	0	11	0	11	0	11
Illinois	5	34,417	10	35,155	27	36,758	29	37,689	213	37,828	231	38,366
Indiana	9	4,825	3	4,954	23	5,011	19	5,160	300	4,816	173	5,094
Kansas	42	33,272	31	34,523	121	35,452	127	36,986	103	38,466	131	39,133
Kentucky	0	16,234	0	16,593	12	17,008	21	17,681	19	18,238	8	18,982
Louisiana	4,354	8,583	4,937	9,588	5,855	10,817	6,998	11,737	7,991	12,224	8,537	13,176
Michigan	123	3,863	190	3,842	550	3,689	550	3,453	615	3,397	41	4,198
Mississippi	307	1,536	319	1,547	497	1,617	628	1,801	327	2,005	352	2,087
Missouri	0	91	0	89	0	97	0	130	0	120	0	119
Montana	51	3,421	110	3,641	311	3,587	512	3,516	585	3,261	407	3,210
Nebraska	0	302	0	547	31	932	19	1,602	87	1,616	26	1,320
Nevada	0	0	0	1	0	3	0	3	0	2	0	2
New Mexico	3,644	3,606	3,710	3,656	3,502	4,727	3,563	5,424	4,259	5,809	3,972	6,839
New York	0	23,000	0	22,500	0	22,300	0	21,300	0	19,200	0	19,765
North Dakota	179	73	353	88	444	92	458	313	543	395	503	640
Ohio	70	19,400	90	15,210	80	14,660	75	14,745	130	14,700	175	14,850
Oklahoma	2,120	60,956	2,860	64,551	3,180	71,430	2,773	73,019	2,264	75,623	2,771	76,981
Pennsylvania	0	80,500	0	80,000	0	78,500	0	76,500	0	69,700	0	68,050
South Dakota	0	1	0	2	0	3	0	3	0	3	1	3
Tennessee	0	29	0	44	0	25	0	40	0	35	0	31
Texas	45,976	94,884	47,032	100,712	47,669	108,911	48,513	117,473	48,098	125,861	47,897	131,781
Utah	3	66	1	81	2	68	23	87	129	210	307	241
Virginia	0	25	0	25	0	25	0	20	0	0	0	0
Washington	0	0	0	0	0	0	0	0	2	0	1	0
West Virginia	0	13,600	0	13,000	0	12,500	0	12,000	0	12,700	0	12,740
Wyoming	278	4,841	368	5,321	535	5,681	473	5,959	513	6,074	467	6,334
U.S. Total	59,465	442,394	62,156	454,652	65,364	472,318	67,257	487,517	68,527	495,016	68,123	506,392

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1959 Flowing	1959 Artificial Lift	1960 Flowing	1960 Artificial Lift	1961 Flowing	1961 Artificial Lift	1962 Flowing	1962 Artificial Lift	1963 Flowing	1963 Artificial Lift	1964 Flowing	1964 Artificial Lift
Alabama	29	244	0	380	0	414	0	447	0	499	0	479
Alaska	5	0	18	0	45	0	50	2	48	7	37	17
Arizona	1	0	2	1	0	4	0	13	0	5	0	10
Arkansas	178	5,881	183	5,810	190	6,267	543	5,301	160	5,239	150	5,950
California	1,115	36,101	1,196	36,388	1,033	37,203	1,213	37,980	1,251	39,099	1,270	39,510
Colorado	382	1,701	127	1,892	115	1,864	110	1,865	72	1,888	58	1,832
Florida	0	11	0	11	0	11	0	11	0	12	0	16
Illinois	128	38,736	67	38,239	74	39,381	0	30,196	0	30,114	0	29,319
Indiana	169	5,303	86	5,381	84	5,792	0	5,887	0	5,937	0	5,949
Kansas	243	39,921	312	46,270	270	46,920	275	47,286	278	47,587	300	48,700
Kentucky	19	21,137	13	20,733	15	20,746	0	19,800	0	19,000	0	15,726
Louisiana	9,280	13,805	8,896	14,389	9,420	14,612	10,951	14,691	11,692	16,037	12,401	17,260
Michigan	59	4,332	850	3,704	931	3,413	832	3,538	915	3,188	915	3,660
Mississippi	383	2,236	277	2,347	289	2,408	525	2,035	554	2,139	342	2,238
Missouri	0	95	0	121	0	120	0	111	0	118	0	87
Montana	331	3,375	33	3,478	33	3,404	41	3,659	36	3,552	34	3,960
Nebraska	21	1,473	15	1,627	18	1,967	0	1,855	5	1,769	5	1,733
Nevada	0	2	0	2	0	2	0	2	0	4	0	5
New Mexico	4,530	7,657	5,323	7,261	4,880	8,857	5,324	8,909	4,861	9,003	4,814	9,828
New York	0	19,275	0	19,000	0	18,000	0	13,500	0	13,100	0	12,800
North Dakota	392	988	74	1,343	92	1,453	567	1,015	600	1,206	453	1,428
Ohio	160	14,768	150	14,560	145	14,305	150	14,350	80	14,525	50	13,683
Oklahoma	2,987	78,128	3,147	80,459	3,775	81,048	3,750	77,795	3,840	77,686	3,857	76,602
Pennsylvania	0	67,580	10	65,000	0	61,896	0	56,900	20	55,360	22	53,043
South Dakota	0	11	0	19	0	24	0	18	0	24	0	24
Tennessee	0	30	0	27	0	30	0	30	0	40	0	41
Texas	47,366	138,298	45,722	143,789	44,936	147,587	44,202	149,526	42,218	152,251	40,481	154,088
Utah	346	317	352	404	349	602	320	500	318	520	15	926
Virginia	0	0	0	8	0	8	0	5	0	6	0	6
Washington	1	0	1	0	1	0	0	0	0	0	0	0
West Virginia	0	12,885	0	12,950	0	12,350	0	12,800	0	13,000	0	13,200
Wyoming	489	6,629	413	7,117	408	7,417	400	9,000	455	7,459	450	7,481
U.S. Total	68,614	520,919	67,267	532,710	67,103	538,105	69,253	519,027	67,403	520,374	65,654	519,601

Source: World Oil Magazine

Section III
Table 19c

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

	1965		1966		1967		1968		1969		1970	
State	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	0	530	0	520		529	5	542	7	467	8	468
Alaska	25	35	42	15	70	19	93	86	58	135	41	120
Arizona	6	4	6	4	(1)	(1)	0	(1)	0	0	(1)	(1)
Arkansas	212	5,730	104	5,453	197	6,237	83	5,896	106	6,012	100	6,100
California	1,204	40,323	1,176	40,516	1,026	40,597	1,428	40,103	1,390	39,505	1,350	37,718
Colorado	61	1,771	42	1,649	37	1,773	33	1,782	30	1,748	37	1,733
Florida	2	36	0	41	(1)	(1)	0	(1)	0	0	(1)	(1)
Illinois	0	29,012	20	28,550	0	27,874	0	27,242	0	26,737	0	26,298
Indiana	0	4,149	0	4,149	0	3,637	0	3,621	0	3,646	0	3,607
Kansas	300	46,200	300	40,622	400	45,925	400	44,755	350	44,390	350	44,315
Kentucky	0	15,600	0	16,000	500	13,500	609	13,000	532	13,220	502	14,000
Louisiana	12,982	17,921	12,338	18,546	12,435	18,511	11,018	19,015	10,756	18,861	9,064	19,214
Michigan	890	3,153	800	3,204	77	3,291	686	3,587	551	3,821	677	3,196
Mississippi	354	2,159	362	2,187	348	2,172	328	2,271	303	2,245	290	2,276
Missouri	0	100	0	142	(1)	(1)	0	(1)	0	0	(1)	(1)
Montana	46	3,677	11	3,582	38	3,724	14	3,252	25	3,460	3	3,159
Nebraska	5	1,614	0	1,493	4	1,457	3	1,404	2	1,369	6	1,299
Nevada	0	9	0	10	(1)	(1)	0	(1)	0	0	(1)	(1)
New Mexico	4,682	9,753	3,499	10,798	3,645	10,712	3,277	11,106	3,186	11,152	3,198	11,075
New York	0	11,700	100	12,200	100	12,000	0	11,500	0	9,500	0	5,000
North Dakota	524	1,439	315	1,718	250	1,513	224	1,503	495	1,155	229	1,506
Ohio	60	13,873	50	14,133	50	14,240	60	14,347	80	14,584	60	14,727
Oklahoma	3,800	76,200	4,000	77,477	4,000	76,971	4,000	76,999	4,000	76,947	4,000	74,212
Pennsylvania	18	52,713	75	50,570	50	45,376	50	35,950	50	33,950	70	30,555
South Dakota	0	29	0	29	(1)	(1)	0	(1)	0	0	(1)	(1)
Tennessee	0	42	0	34	(1)	(1)	0	(1)	0	0	(1)	(1)
Texas	39,052	155,618	36,160	155,281	33,060	155,761	31,525	152,452	28,934	149,837	26,199	146,014
Utah	9	852	10	861	15	981	15	881	15	867	23	884
Virginia	0	7	0	2	(1)	(1)	0	(1)	0	0	(1)	(1)
West Virginia	0	13,400	0	13,300	0	14,250	0	14,000	0	13,800	0	13,700
Wyoming	400	7,594	422	8,012	456	8,091	527	8,396	687	8,386	700	8,800
Other	0	0	0	0	3	263	0	263	0	289	21	273
U.S. Total	64,632	515,243	59,832	511,098	57,465	509,404	54,378	493,593	51,557	486,083	46,928	470 249

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(1) Included in other.

Source: World Oil Magazine

Section III
Table 19d

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1971		1972		1973		1974		1975		1976	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	14	524	27	499	44	510	35	384	36	530	40	593
Alaska	53	130	58	139	52	140	42	186	36	164	38	152
Arizona	0	29	1	22	1	22	0	28	0	28	0	27
Arkansas	60	7,086	69	7,168	96	6,328	123	6,993	125	6,947	140	7,072
California	1,300	39,298	421	39,865	496	42,847	453	39,777	370	40,569	496	44,287
Colorado	50	1,845	110	1,709	134	1,721	119	1,921	108	2,232	111	2,265
Florida	8	65	68	67	81	64	63	70	72	72	66	78
Illinois	0	25,369	0	24,736	0	24,307	0	23,718	0	23,360	0	23,509
Indiana	0	3,600	0	4,379	0	4,323	0	4,376	0	4,380	0	4,798
Kansas	325	41,960	325	40,730	319	42,181	276	41,480	250	41,695	200	42,050
Kentucky	557	14,100	560	14,056	100	14,316	0	14,129	0	14,231	0	13,970
Louisiana	7,534	18,216	7,388	19,208	6,203	21,666	6,545	21,428	5,979	21,755	6,128	20,272
Michigan	650	3,200	668	3,129	659	3,082	682	3,132	548	3,107	608	3,162
Mississippi	300	2,255	275	2,298	202	2,108	180	2,074	160	2,077	149	2,063
Missouri	0	139	0	138	0	135	0	137	0	157	0	145
Montana	23	3,707	19	3,196	3	3,533	7	3,021	7	3,143	12	3,298
Nebraska	4	1,190	4	1,176	0	1,118	0	1,109	0	1,127	0	1,292
Nevada	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New Mexico	2,388	10,997	2,386	11,048	2,300	11,138	2,143	11,139	2,255	11,395	2,313	11,533
New York	0	5,860	0	5,500	0	5,400	0	5,475	0	4,975	0	5,000
North Dakota	263	1,453	225	1,340	224	1,237	243	1,245	236	1,248	269	1,302
Ohio	50	14,581	295	14,491	304	14,847	302	14,847	288	14,877	310	15,143
Oklahoma	4,000	71,549	4,000	69,807	3,943	69,082	3,879	67,969	4,089	67,568	4,131	68,257
Pennsylvania	70	29,731	80	26,949	75	32,521	75	30,825	50	32,200	65	32,000
South Dakota	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	12	59	16	40	6	61	31	56	55	94	75	122
Texas	24,305	149,902	22,680	148,689	19,998	139,314	20,063	40,011	18,584	152,462	16,997	143,678
Utah	46	828	87	812	82	1,362	230	989	121	935	100	1,088
Virginia	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Washington	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
West Virginia	0	13,500	0	13,530	0	13,600	0	13,650	0	13,750	0	13,800
Wyoming	650	8,600	600	8,350	535	7,107	606	8,050	662	8,788	720	9,307
Other	0	36	0	72	10	31	9	28	9	28	1	17
U.S. Total	42,662	469,809	40,362	463,143	35,867	464,101	36,105	458,247	34,040	473,900	32,969	470,299

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(1) Included in other.

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1977		1978		1979		1980		1981		1982	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	40	597	55	575	57	457	57	612	103	589	122	597
Alaska	135	156	188	178	240	160	412	230	296	404	330	430
Arizona	0	28	0	31	0	35	0	32	0	35	0	36
Arkansas	155	7,348	197	7,356	202	7,496	140	7,964	156	8,093	173	8,456
California	481	42,973	517	44,482	1,635	43,039	1,667	43,924	1,592	45,770	1,470	45,761
Colorado	213	2,832	226	3,001	183	3,219	188	3,302	151	2,747	218	2,895
Florida	144	0	50	65	43	72	40	80	42	75	50	73
Illinois	0	23,828	0	23,869	0	24,067	0	24,745	0	26,100	0	27,600
Indiana	0	4,891	0	5,076	0	5,296	0	5,452	0	5,715	0	6,047
Kansas	200	42,250	204	43,054	223	47,156	60	47,397	42	42,360	46	46,143
Kentucky	0	14,046	0	14,149	0	14,097	0	14,517	0	14,585	0	15,109
Louisiana	2,228	21,653	2,244	22,256	4,251	20,516	4,226	21,788	3,871	21,449	2,001	20,379
Michigan	603	3,300	547	3,343	547	3,343	585	3,524	631	3,786	636	3,900
Mississippi	152	2,108	88	2,166	91	2,465	120	2,511	144	3,010	132	2,508
Missouri	0	161	0	161	0	188	20	238	0	421	0	499
Montana	70	3,284	328	2,947	375	3,198	325	3,303	375	3,593	350	3,961
Nebraska	0	1,369	0	1,455	0	1,535	4	1,675	0	1,870	0	2,006
Nevada	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
New Mexico	2,405	11,860	2,144	12,254	2,723	12,322	2,565	13,181	2,986	13,303	3,068	13,458
New York	0	4,800	0	4,900	0	4,800	0	5,000	0	5,300	0	5,320
North Dakota	297	1,341	358	1,374	404	1,504	554	1,736	622	1,948	800	2,070
Ohio	347	17,016	362	17,735	384	18,793	409	20,042	447	21,994	470	24,282
Oklahoma	4,203	69,450	4,247	70,623	4,345	72,160	4,332	74,131	4,563	78,076	5,046	86,699
Pennsylvania	50	28,755	50	28,350	56	27,712	56	27,869	52	26,086	52	25,233
South Dakota	(1)	(1)	0	(1)	3	85	3	115	0	120	0	130
Tennessee	115	157	119	160	144	194	106	335	117	372	120	530
Texas	16,168	147,647	16,109	149,708	16,665	151,458	16,751	157,940	17,351	163,276	16,170	171,456
U.S. Federal Waters	2,702	829	2,624	805	915	2,344	917	2,349	3,267	1,268	3,589	1,396
Utah	369	494	552	739	576	770	436	1,042	419	1,124	396	1,187
Virginia	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
Washington	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
West Virginia	0	13,900	0	14,100	0	14,225	0	14,425	0	14,700	0	14,900
Wyoming	725	9,378	718	9,293	724	9,335	736	9,491	833	10,741	825	10,967
Other	13	74	0	106	0	28	0	31	0	39	1	49
U.S. Total	31,815	476,525	31,927	484,311	34,786	492,069	34,529	508,981	38,060	518,949	36,065	544,077

(1) Included in other.

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

	1983		1984		1985		1986	
State	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	102	639	50	709	91	719	102	742
Alaska	406	266	370	270	481	496	591	518
Arizona	0	34	0	31	0	28	0	24
Arkansas	168	8,202	189	9,301	195	9,505	201	9,486
California	1,482	45,715	1,423	47,118	1,455	48,419	1,419	42,298
Colorado	304	4,287	571	4,789	491	4,966	490	5,012
Florida	62	75	57	81	67	82	46	68
Illinois	0	28,967	0	28,920	0	31,100	0	32,025
Indiana	0	6,465	0	6,792	0	7,164	0	7,610
Kansas	53	49,295	49	49,149	75	51,813	73	48,743
Kentucky	0	15,562	0	19,980	0	21,844	0	22,639
Louisiana	2,110	21,266	2,168	22,340	2,285	23,538	2,205	22,430
Michigan	663	4,250	749	4,132	600	4,525	635	4,250
Mississippi	135	2,592	259	2,303	116	3,352	179	2,056
Missouri	0	552	0	557	0	581	0	450
Montana	400	4,275	424	4,292	378	3,818	362	3,571
Nebraska	0	2,100	0	2,095	0	2,091	0	1,838
Nevada	0	(1)	(1)	(1)	4	41	6	23
New Mexico	3,161	14,248	3,030	14,843	3,444	15,253	3,403	15,006
New York	7	5,425	28	4,650	20	4,791	10	4,622
North Dakota	717	3,017	830	2,574	927	2,770	641	2,902
Ohio	523	25,764	535	26,343	556	27,419	386	29,551
Oklahoma	4,794	91,074	4,980	94,620	5,150	97,850	5,013	95,248
Pennsylvania	47	24,610	0	20,739	0	24,000	0	20,000
South Dakota	0	140	0	138	0	165	0	148
Tennessee	126	567	139	636	137	661	0	806
Texas	15,182	180,413	15,216	188,448	16,247	192,793	14,147	187,125
U.S. Federal Waters	1,370	3,340	3,590	514	3,726	601	4,083	342
Utah	388	1,246	360	1,439	389	1,555	372	1,486
Virginia	0	(1)	(1)	(1)	(1)	(1)	0	32
Washington	0	(1)	(1)	(1)	(1)	(1)	0	0
West Virginia	0	15,300	0	15,475	0	15,895	0	15,759
Wyoming	794	10,555	809	10,752	831	11,207	784	11,095
Other	0	55	5	63	0	28	0	0
U.S. Total	32,994	570,296	36,104	584,093	37,665	609,070	35,148	588,256

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(1) Included in other.

Source: World Oil Magazine, February issue.

Section III
Table 20

U.S. STRIPPER WELLS BY STATE
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama			14	39	44	75	71	78	69	78	68	73
Arizona		2	2	1	4	6	7	7	7	8	10	12
Arkansas	5,997	5,961	6,203	6,201	6,094	6,100	6,025	6,736	6,822	6,767	6,820	5,847
California	21,395	23,753	31,391	31,466	34,559	32,124	29,983	28,328	24,198	25,957	25,400	26,566
Colorado	748	774	807	867	818	881	942	990	1,016	1,074	1,143	1,255
Illinois	26,095	25,202	24,363	23,960	23,279	23,222	23,275	23,499	23,622	23,860	24,501	25,472
Indiana	7,246	6,995	7,570	4,251	3,962	4,654	4,853	5,056	5,038	5,092	5,022	5,874
Kansas	40,513	39,552	39,853	40,176	40,105	40,597	41,764	42,273	43,154	44,686	41,876	42,924
Kentucky	14,615	14,585	14,511	14,201	13,914	13,690	13,817	14,046	13,953	14,028	14,075	14,130
Louisiana	12,561	12,318	12,907	12,649	12,808	12,723	13,185	13,189	13,600	12,131	15,889	15,950
Michigan	3,555	3,392	3,389	3,356	3,370	3,330	3,260	3,276	3,331	3,405	3,325	3,057
Mississippi	344	313	211	217	278	310	617	654	657	813	1,523	2,138
Missouri	126	139	137	137	157	163	173	161	144	157	301	440
Montana	1,951	1,311	1,186	1,295	1,338	1,873	1,918	1,945	1,983	1,996	2,082	2,058
Nebraska	437	488	417	526	577	638	812	919	987	1,037	1,223	1,414
New Mexico	9,058	9,143	9,122	9,458	9,991	10,274	10,544	10,956	11,401	11,829	12,519	13,226
New York	5,861	5,522	5,528	5,282	4,828	5,231	4,916	4,913	4,700	5,000	5,220	5,345
North Dakota	679	721	749	635	529	560	655	687	741	782	878	836
Ohio	14,447	14,653	14,863	14,906	15,406	15,482	15,586	16,122	17,006	18,222	19,650	21,982
Oklahoma	55,718	54,712	54,788	57,000	59,817	58,736	53,357	56,239	59,971	64,893	66,128	69,781
Pennsylvania	36,801	34,029	32,596	31,539	32,095	31,661	31,274	28,405	27,768	27,925	25,991	25,285
South Dakota		11	12	12	8	9	10	16	11	10	12	23
Tennessee	44	46	41	53	99	133	159	213	265	318	387	398
Texas	85,117	84,950	83,666	82,302	87,412	83,027	91,498	92,887	96,713	98,487	103,594	107,596
Utah	37	44	53	84	74	48	77	74	95	106	125	196
Virginia	3	3	1	0	3	7	7	4	5	7	8	12
West Virginia	13,150	13,270	13,375	13,500	13,600	13,680	13,800	13,875	13,925	14,000	14,150	14,300
Wyoming	2,640	1,811	1,716	1,116	926	2,629	3,148	3,387	3,453	3,642	3,252	3,349
Total	359,130	351,696	350,471	355,229	366,095	367,872	365,733	368,930	374,635	386,310	395,176	409,539

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section III
Table 20a

U.S. STRIPPER WELLS BY STATE
(As of January 1)

State	1983	1984	1985	1986	1987	1988
Alabama	92	95	98	100	124	122
Arizona	14	17	14	14	16	15
Arkansas	5,167	7,218	4,738	4,942	4,416	4,438
California	26,354	26,358	26,650	29,230	29,044	26,988
Colorado	1,354	1,861	1,690	1,798	4,269	5,097
Illinois	26,813	28,566	29,942	30,593	31,649	31,883
Indiana	5,353	5,854	6,134	5,457	5,165*	4,985*
Kansas	44,521	47,592	45,749	48,235	50,182	51,953
Kentucky	14,275	17,000	16,433	17,674	17,992	18,073
Louisiana	12,010	16,500	16,500	16,000	15,500	15,000
Michigan	3,361	3,367	3,500	3,475	3,285*	3,015*
Mississippi	1,923	837	837	811	681*	644
Missouri	530	548	548	429	388	289
Montana	2,243	2,673	3,085	3,376	3,493	3,300
Nebraska	1,585	1,672	1,707	1,716	1,637	1,589
New Mexico	13,882	14,280	14,749	15,199	14,466	14,622
New York	5,259	4,228	4,532	4,448	4,309	4,221
North Dakota	959	922	1,016	1,091	1,106	1,125
Ohio	22,966	24,263	25,129	26,412	28,652	28,908
Oklahoma	73,328	77,729	82,431	83,034	84,425	77,154
Pennsylvania	23,438	21,831	19,540	11,877	14,271	13,255
South Dakota	33	33	30	24	17	27
Tennessee	N.A.	716	689	952	848	853
Texas	111,671	117,178	126,202	130,311	123,796	123,945
Utah	N.A.	217	348	519	853	824
Virginia	20	26	32	30	49	51
West Virginia	14,550	14,900	15,200	15,500	15,800	15,925
Wyoming	4,792	5,020	5,020	5,200	3,996	3,486
Total	416,493	441,501	452,543	458,447	460,429	451,787

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* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section III
Table 21

U.S. STRIPPER WELL ABANDONMENTS BY STATE
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	--	--	0	19	1	1	8	2	9	3	14	2
Arizona	--	0	0	0	0	0	0	0	0	0	1	1
Arkansas	76	76	55	73	99	26	19	17	42	8	3	5
California	746	1,197	727	1,042	614	695	563	782	881	824	781	1,146
Colorado	103	105	141	84	99	75	94	57	42	40	31	37
Illinois	903	1,096	1,006	644	1,037	766	574	420	400	354	352	303
Indiana	118	96	108	127	100	154	97	97	44	72	262	201
Kansas	1,595	2,433	1,356	1,173	1,900	1,195	753	605	559	541	481	657
Kentucky	367	345	366	397	523	534	306	220	252	198	77	86
Louisiana	385	506	630	562	349	302	310	226	182	134	59	166
Michigan	91	127	95	102	71	51	31	34	47	42	33	61
Mississippi	24	34	25	16	22	15	21	29	173	113	58	60
Missouri	31	0	0	0	0	13	0	12	17	0	0	3
Montana	889	200	119	29	11	11	7	7	12	29	28	17
Nebraska	47	50	50	72	74	9	10	14	59	17	18	11
New Mexico	856	770	749	691	536	499	443	417	432	448	420	435
New York	629	419	573	544	622	553	442	455	352	117	119	161
North Dakota	3	13	78	5	2	4	4	3	6	5	4	4
Ohio	650	460	369	440	611	446	310	202	171	229	176	164
Oklahoma	2,705	2,273	1,604	1,737	1,865	1,739	881	793	656	623	596	644
Pennsylvania	1,376	3,824	1,632	1,951	346	434	1,421	1,034	899	1,229	809	733
South Dakota	--	0	0	0	4	1	0	1	2	6	3	2
Tennessee	0	0	12	7	6	9	6	5	13	6	7	11
Texas	3,860	4,265	3,682	3,884	4,608	5,716	3,177	3,057	2,599	2,268	1,938	1,948
Utah	3	6	6	25	26	39	47	56	54	52	10	12
Virginia	2	0	0	1	1	0	0	1	0	1	1	0
West Virginia	92	80	38	26	124	114	53	13	10	10	10	14
Wyoming	80	46	62	105	124	77	339	441	467	289	323	331
U.S. TOTAL	15,631	18,421	13,483	13,756	13,779	13,478	9,916	9,000	8,380	7,668	6,614	7,215

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section III
Table 21a

U.S. STRIPPER WELL ABANDONMENTS BY STATE
(As of January 1)

State	1983	1984	1985	1986	1987	1988
Alabama	4	1	3	1	2	7
Arizona	0	1	1	0	0	0
Arkansas	91	39	62	85	110	106
California	886	578	1,126	1,182	614	875
Colorado	N.A.	N.A.	36	94	98	224
Illinois	262	145	629	390	343	533
Indiana	425	428	366	387	392•	411•
Kansas	1,363	1,583	1,505	1,693	1,584	1,521
Kentucky	256	397	393	391	516	772
Louisiana	160	637	852	1,213	1,326•	1,267•
Michigan	N.A.	99	107	115	127•	170•
Mississippi	82	86	96	98	103•	137•
Missouri	61	0	N.A.	0	34	51•
Montana	55	N.A.	430	450	75	140
Nebraska	15	18	36	36	45	39
New Mexico	621	628	644	721	1,761	1,000
New York	249	70	140	226	449•	354
North Dakota	15	24	12	78	50	55
Ohio	226	297	354	612	291	343
Oklahoma	835	1,093	1,491	1,156	1,442	1,779
Pennsylvania	863	880	848	930	955•	996•
South Dakota	3	4	4	0	4	1
Tennessee	N.A.	N.A.	0	N.A.	N.A.	110
Texas	2,920	3,980	4,931	6,015	7,585	6,708
Utah	N.A.	24	22	75	89•	93•
Virginia	0	0	3	2	5•	1
West Virginia	34	20	79	74	24	38
Wyoming	N.A.	N.A.	N.A.	N.A.	1,204	510
U.S. TOTAL	9,426	11,032	14,170	16,024	19,233	18,241

N.A. = Not Available
• Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1970	1971	1972	1973	1974	1975	1976	1977	1978
Australia	386	402	398	394	373	361	378	359	375
Brunei Malaysia	592	537	558	126	519	504	574	648	712
India	200	1,545	1,545	1,500	2,500	1,545	1,548	1,600	1,600
Indonesia	2,136	2,055	2,344	2,567	2,710	3,018	3,162	3,421	3,644
Japan	1,725	2,341	1,078	1,084	1,044	1,009	464	448	542
TOTAL ASIA-PACIFIC	5,200	7,046	6,692	6,479	6,861	7,156	6,645	7,006	7,407
Austria	1,268	1,298	1,270	1,250	1,271	1,291	1,222	1,219	1,250
Netherlands	369	351	319	319	347	368	392	393	416
Norway	-	1	4	4	6	24	29	36	50
United Kingdom	60	55	56	63	57	77	90	135	109
West Germany	3,065	3,078	2,833	2,782	2,699	2,699	2,827	2,933	2,933
TOTAL WESTERN EUROPE	5,243	5,217	4,807	5,869	5,916	5,981	6,109	6,266	5,208
Abu Dhabi	94	98	115	142	160	216	209	232	240
Iran	266	280	313	350	369	425	428	518	551
Iraq	113	122	132	133	156	156	170	200	250
Kuwait	741	692	692	692	692	692	596	586	586
Neutral Zone	450	480	440	362	449	449	476	459	455
Qatar	69	80	84	92	81	88	77	77	95
Saudi Arabia	423	425	535	627	670	711	701	754	875
TOTAL MIDDLE EAST	2,862	2,922	3,108	3,187	3,358	3,919	3,007	4,161	4,307
Algeria	775	497	524	574	826	984	826	801	989
Egypt	332	204	245	261	437	319	376	401	430
Gabon	100	101	114	122	137	184	212	240	211
Libya	1,083	995	763	895	979	851	877	797	817
Nigeria	364	570	774	898	1,088	1,052	1,259	1,374	1,322
TOTAL AFRICA	2,898	2,592	2,672	3,016	3,777	3,699	3,804	3,956	4,160
Mexico	3,127	3,908	3,412	4,345	3,301	3,285	3,382	3,419	4,145
Venezuela	9,364	9,360	11,245	12,461	12,450	10,718	10,720	1,932	11,909
United States	530,990	517,318	508,443	497,378	497,631	500,333	499,110	507,034	516,752
Canada	23,675	22,779	20,911	22,996	21 202	18,573	25,055	26,112	25,800
TOTAL WESTERN HEMIS.	582,649	569,172	558,947	551,543	548,894	546,866	574,224	555,034	575,695
TOTAL FREE WORLD	598,852	586,949	576,226	570,094	568,806	567,621	593,789	576,423	596,777

Source: United States, U.S. Department of Energy
Rest of world, Oil and Gas Journal

Section III
Table 22a

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1979	1980	1981	1982	1983	1984	1985	1986
Australia	370	403	399	435	509	545	746	879
Brunei-Malaysia	819	808	788	843	965	1,017	999	1,080
India	1,600	1,600	1,600	1,560	1,560	1,560	2,201	2,201
Indonesia	3,823	3,700	4,077	4,341	4,840	4,840	5,378	5,124
Japan	507	388	382	397	370	348	256	284
TOTAL ASIA PACIFIC	7,684	7,465	7,843	8,184	8,885	8,992	10,381	10,374
Austria	1,254	1,120	1,164	1,229	1,240	1,243	1,605	1,069
Netherlands	473	480	516	533	623	633	644	663
Norway	50	100	117	131	144	171	178	178
United Kingdom	240	290	361	379	387	535	627	661
West Germany	2,945	2,957	3,004	3,077	3,142	3,136	3,152	3,129
TOTAL WESTERN EUROPE	5,421	5,401	5,708	5,978	6,228	6,922	7,509(1)	7,643(1)
Abu Dhabi	250	341	277	352	222	254	254	392
Iran	547	547	530	530	530	530	361	361
Iraq	250	250	280	280	290	290	NA	NA
Kuwait	590	590	546	530	530	530	572	363
Neutral Zone	423	412	450	445	450	464	493	493
Qatar	95	124	128	125	125	174	174	174
Saudi Arabia	725	733	782	555	555	555	NA	NA
TOTAL MIDDLE EAST	4,381	4,193	4,304	4,639	4,643	4,582	3,797(1)	3,875(1)
Algeria	970	1,000	1,050	1,085	1,090	1,090	NA	NA
Egypt	432	484	450	411	500	617	658	666
Gabon	218	242	250	266	270	270	297	500
Libya	896	886	889	891	905	905	671	661
Nigeria	1,457	1,451	1,491	1,312	1,296	1,177	1,153	1,111
TOTAL AFRICA	4,372	4,522	4,672	4,565	4,860	4,937	3,708(1)	3,838
Mexico	4,200	3,384	3,593	3,605	3,640	NA	3,209	3,737
Venezuela	12,486	5,042	13,610	14,029	11,604	13,512	10,103	10,103
United States	531,395	547,717	557,009	580,142	636,900	615,500	642,000	639,735
Canada	18,323	20,721	33,404	33,907	36,388	39,146	43,480	50,037
TOTAL WESTERN HEMIS.	583,748	594,741	625,056	650,162	708,342	690,169	721,857	727,218
TOTAL FREE WORLD	608,606	616,322	647,583	673,528	732,958	715,602(1)	747,252(1)	752,948(1)

NA Not Available
(1) Total is incomplete because figures for all countries are not available.

Source: United States, 1976-1980: U.S. Department of Energy
1981: World Oil Magazine
Rest of World, Oil and Gas Journal
1983-1986: Oil and Gas Journal

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1987
Australia	926
Brunei-Malaysia	1,056
India	2,670
Indonesia	6,065
Japan	387
TOTAL ASIA-PACIFIC	12,018
Austria	1,198
Netherlands	478
Norway	215
United Kingdom	787
West Germany	3,088
TOTAL WESTERN EUROPE	7,199(1)
Abu Dhabi	1,001
Iran	361
Iraq	868
Kuwait	363
Neutral Zone	492
Qatar	174
Saudi Arabia	588
TOTAL MIDDLE EAST	6,289
Algeria	840
Egypt	821
Gabon	299
Libya	664
Nigeria	1,522
TOTAL AFRICA	5,296
Mexico	3,768
Venezuela	28,101
United States	613,430
Canada	37,882
TOTAL WESTERN HEMISPHERE	708,710
TOTAL FREE WORLD	739,512(1)

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(1) Totals are incomplete because figures for all countries are not available.

Source: Oil and Gas Journal, "Worldwide Report" issue.

Section III
Table 23

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1859	1	0	1	0	2	1
1860	201	0	39	0	240	202
1861	190	0	57	0	247	392
1862	322	0	63	0	385	713
1863	488	0	107	0	595	987
1864	951	0	181	0	1,132	1,303
1865	899	0	378	0	1,277	1,611
1866	795	0	347	0	1,142	1,885
1867	789	0	467	0	1,256	2,360
1868	862	0	202	0	1,064	2,946
1869	986	0	696	0	1,682	3,737
1870	1,002	0	637	0	1,639	4,363
1871	1,005	0	447	0	1,452	4,987
1872	768	0	398	0	1,166	5,271
1873	948	0	296	0	1,244	5,607
1874	1,002	0	302	0	1,304	5,958
1875	1,890	0	568	0	2,458	6,973
1876	2,631	0	329	0	2,960	8,960
1877	3,298	0	658	0	3,956	11,551
1878	2,660	0	328	0	2,988	13,536
1879	2,669	0	148	0	2,817	15,521
1880	4,022	0	144	0	4,216	18,634
1881	3,694	0	182	0	3,876	21,168
1882	3,092	0	179	0	3,271	22,258
1883	2,655	84	279	0	3,018	22,365
1884	2,094	1	270	0	2,365	21,083
1885	2,572	4	379	0	2,955	20,753
1886	3,340	0	968	0	4,308	20,963
1887	1,637	0	505	0	2,142	19,425
1888	1,750	45	491	0	2,286	18,453
1889	5,445	133	1,119	0	6,697	21,833
1890	7,342	50	1,439	0	8,831	27,341
1891	4,168	49	990	0	5,207	29,480
1892	3,090	3	785	0	3,878	31,059
1893	3,474	3	799	0	4,276	32,339
1894	6,138	18	1,493	0	7,649	36,841
1895	10,838	8	2,404	0	13,250	45,784
1896	11,219	14	2,784	0	14,017	54,319
1897	7,571	7	2,237	0	9,815	57,591
1898	7,058	16	1,823	0	8,897	61,288
1899	11,630	22	2,701	0	14,353	69,673

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1900	13,671	17	3,389	0	17,077	78,745
1901	11,811	10	3,276	0	15,097	85,111
1902	13,019	15	3,440	0	16,474	92,371
1903	15,177	322	3,670	0	19,169	101,182
1904	16,008	449	4,088	0	20,545	110,928
1905	12,601	382	3,583	0	16,566	115,943
1906	14,550	493	3,787	0	18,830	122,590
1907	15,534	555	3,579	0	17,668	133,040
1908	13,210	485	3,214	0	16,909	141,453
1909	13,785	1,048	3,404	0	18,327	146,736
1910	11,018	1,500	2,422	0	14,940	148,619
1911	9,825	1,580	2,363	0	13,768	150,793
1912	12,514	1,811	2,855	0	17,180	155,046
1913	19,101	2,207	4,282	0	25,590	170,774
1914	16,668	2,327	4,142	0	23,137	180,177
1915	9,154	2,022	2,981	0	14,157	181,317
1916	18,777	1,803	4,039	0	24,619	192,108
1917	16,590	1,966	4,851	0	23,407	199,319
1918	17,845	2,229	5,613	0	25,687	207,815
1919	21,052	2,135	5,986	0	29,173	228,084
1920	24,273	2,174	7,364	0	33,911	268,247
1921	14,666	2,111	5,160	0	21,937	274,500
1922	17,333	2,024	5,332	0	24,689	284,880
1923	16,206	2,367	5,865	0	24,438	290,100
1924	14,587	2,257	5,044	0	21,888	299,100
1925	16,559	2,330	6,734	0	25,623	306,100
1926	19,013	2,341	7,965	0	29,319	318,600
1927	14,442	2,491	7,210	0	24,143	323,300
1928	12,526	2,727	7,078	0	22,331	327,800
1929	15,572	2,870	7,914	0	26,356	328,200
1930	11,640	2,866	6,734	0	21,240	331,070
1931	6,788	1,985	3,659	0	12,432	315,850
1932	10,444	1,027	3,569	0	15,040	321,500
1933	8,068	932	3,312	0	12,312	326,850
1934	12,520	1,368	4,309	0	18,197	333,070
1935	14,663	1,401	4,911	445(1)	21,420	340,990
1936	17,800	2,070	5,297	723	25,890	349,450
1937	22,386	2,676	6,560	1,453	33,075	363,030
1938	18,598	2,066	6,141	688	27,493	369,640
1939	17,625	2,198	6,474	1,420	27,717	380,390

(1) Not available prior to 1935.

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section III
Table 23b

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1940	19,125	2,352	6,617	1,947	30,041	389,010
1941	19,552	3,007	7,128	2,366	32,053	399,960
1942	10,492	2,068	5,504	1,760	19,824	404,840
1943	9,717	1,782	6,385	1,547	19,431	407,170
1944	13,028	3,067	7,009	2,156	25,260	412,220
1945	14,297	2,898	7,471	2,209	26,875	415,750
1946	15,851	3,090	8,047	2,237	29,225	421,460

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

BASIC PETROLEUM DATA BOOK

SECTION IV. PRODUCTION

Table 1. World Crude Oil Production by Area

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Table 10. Historical U.S. Crude Oil Production by State: 1859-1946

Section IV
Table 1

WORLD CRUDE OIL PRODUCTION BY AREA
(Thousands of barrels)

Year	United States(1)	Canada	Latin America	Western Europe	Middle East	Africa	Asia	Total Free World	Communist Nations	Total World
1947	1,856,987	7,692	574,170	12,873	306,320	8,649	24,568	2,791,259	230,880	3,022,139
1948	2,020,185	12,287	633,568	13,114	416,780	13,499	55,878	3,165,311	267,923	3,433,234
1949	1,841,940	21,305	634,560	17,651	511,507	16,135	74,518	3,117,616	286,526	3,404,142
1950	1,973,574	29,044	716,655	25,310	640,862	16,702	86,883	3,489,030	313,997	3,803,027
1951	2,247,711	47,615	804,154	33,696	700,643	16,947	101,218	3,951,984	330,746	4,282,730
1952	2,289,836	61,237	843,522	40,533	760,599	17,561	108,981	4,122,269	408,845	4,531,114
1953	2,357,082	80,899	828,792	47,922	884,736	17,900	121,377	4,338,708	459,347	4,798,055
1954	2,314,988	96,080	893,403	55,101	998,932	15,225	127,637	4,501,366	515,225	5,016,591
1955	2,484,428	129,440	1,000,431	64,625	1,185,519	13,837	138,682	5,016,962	608,697	5,625,659
1956	2,617,283	171,981	1,127,925	72,556	1,260,610	13,224	145,824	5,409,403	715,273	6,124,676
1957	2,616,901	181,848	1,257,309	83,429	1,293,099	18,102	166,631	5,617,319	821,125	6,438,444
1958	2,449,016	165,496	1,214,520	87,345	1,558,351	31,713	169,824	5,676,265	931,485	6,607,750
1959	2,574,590	184,778	1,300,922	94,248	1,684,636	41,943	193,308	6,074,425	1,058,813	7,133,238
1960	2,574,933	189,534	1,365,594	105,494	1,923,285	105,308	202,312	6,466,460	1,208,000	7,674,460
1961	2,621,758	220,861	1,425,418	114,777	2,055,933	178,613	201,992	6,819,352	1,366,861	8,186,213
1962	2,676,189	244,136	1,550,492	122,104	2,257,951	293,384	218,028	7,362,284	1,519,574	8,881,858
1963	2,752,723	257,662	1,583,086	130,085	2,486,348	434,311	221,610	7,865,825	1,672,521	9,538,346
1964	2,786,822	275,364	1,644,429	142,517	2,786,199	623,586	228,802	8,487,719	1,821,925	10,309,644
1965	2,848,514	296,997	1,681,936	146,199	3,053,941	811,692	245,755	9,085,034	1,977,481	11,062,515
1966	3,027,763	320,467	1,670,315	143,921	3,408,361	1,029,674	256,221	9,856,722	2,165,064	12,021,786
1967	3,215,742	351,287	1,783,731	142,864	3,667,393	1,137,566	288,195	10,586,778	2,327,562	12,914,340
1968	3,329,042	435,906	1,835,054	141,073	4,135,044	1,460,968	338,381	11,675,468	2,470,850	14,146,318
1969	3,371,751	410,814	1,865,248	139,369	4,542,994	1,850,355	403,080	12,583,611	2,638,900	15,222,511
1970	3,517,450	461,177	1,916,188	136,626	5,094,380	2,215,237	502,812	13,843,870	2,874,838	16,718,708
1971	3,453,914	491,846	1,866,791	131,862	5,979,115	2,060,359	580,114	14,564,001	3,098,792	17,662,793
1972	3,455,368	560,693	1,787,957	138.479	6,630,500	2,085,873	690,986	15,349,856	3,250,889	18,600,745
1973	3,360,903	648,348	1,894,715	138,513	7,744,933	2,161,473	815,845	16,764,730	3,603,251	20,367,981
1974	3,202,585	616,532	1,788,690	142,005	7,986,831	1,989,898	816,030	16,542,571	3,995,156	20,537,727

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(1) Includes lease condensate

Source: U.S. Department of the Interior, Bureau of Mines-1947-1958: Minerals Yearbook, Annual
1959-1972: International Petroleum Annual
1973-1974: World Crude Oil Production Annual 1974, July 17, 1975

Section IV
Table 1a

WORLD CRUDE OIL PRODUCTION BY AREA
(Thousands of barrels)

Year	United States(1)	Canada	Latin America	Western Europe	Middle East	Africa	Asia	Total Free World	Communist Nations	Total World
1975	3,056,779	520,666	1,603,333	199,950	7,160,993	1,826,255	806,329	15,174,305	4,328,030	19,502,335
1976	2,976,180	488,680	1,625,069	311,858	8,115,708	2,134,861	922,818	16,575,174	4,616,366	21,191,540
1977	3,009,265	482,021	1,647,362	489,328	8,186,851	2,276,007	1,017,244	17,108,078	4,792,617	21,900,695
1978	3,175,927	483,260	1,736,427	643,149	7,884,927	2,233,791	1,037,520	17,195,001	4,963,250	22,158,251
1979	3,121,310	546,040	1,919,535	828,550	7,868,670	2,423,600	1,051,200	17,758,905	5,118,030	22,876,935
1980	3,146,365	521,184	2,035,692	890,965	6,735,498	2,226,378	1,000,278	16,556,360	5,204,520	21,760,880
1981	3,128,624	469,025	2,182,700	955,570	5,749,480	1,672,065	1,027,110	15,184,574	5,192,125	20,376,699
1982	3,156,715	463,550	2,256,065	1,078,210	4,622,360	1,629,725	955,570	14,162,195	5,184,460	19,346,655
1983	3,170,999	494,940	2,203,505	1,236,620	4,215,750	1,609,650	1,024,555	13,956,019	5,241,400	19,197,419
1984	3,249,696	516,426	2,315,682	1,331,874	4,128,114	1,713,978	1,164,978	14,420,748	5,332,620	19,753,368
1985	3,274,553	531,805	2,284,900	1,369,480	3,761,325	1,772,075	1,142,450	14,136,588	5,352,360	19,488,948
1986	3,168,252	537,280	2,190,000	1,395,030	4,639,150	1,819,890	1,176,760	14,926,362	5,402,730	20,329,092
1987	3,047,378	569,400	2,200,220	1,377,510	4,603,015	1,734,845	1,141,355	14,674,723	5,469,160	20,142,883

(1) Includes lease condensate.

Source: 1975-1978: U.S. Department of Energy, Energy Information Administration, World Crude Oil Production Annual
1979-1987: U.S.--U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual
Rest of World--Central Intelligence Agency, International Energy Statistical Review

Section IV
Table 2

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1974	Nation	1975	Nation	1976
1. U.S.S.R.(1)	3,373,650	1. U.S.S.R.(1)	3,608,850	1. U.S.S.R.(1)	3,822,000
2. United States(1)	3,202,585	2. United States(1)	3,052,048	2. Saudi Arabia(2)	3,053,887
3. Saudi Arabia(2)	2,996,543	3. Saudi Arabia(2)	2,491,834	3. United States(1)	2,976,180
4. Iran	2,197,901	4. Iran	1,952,650	4. Iran	2,168,237
5. Venezuela	1,086,332	5. Venezuela	856,364	5. Venezuela	839,737
6. Kuwait(2)	830,580	6. Iraq	825,521	6. Iraq	834,810
7. Nigeria	823,347	7. Kuwait(2)	670,918	7. Nigeria	756,064
8. Iraq	720,729	8. Nigeria	651,890	8. Libya	704,011
9. Canada	616,532	9. United Arab Emirates	618,310	9. Kuwait(2)	700,000
10. United Arab Emirates	616,485	10. People's Republic of China	571,590	10. United Arab Emirates	692,106
11. Libya	555,291	11. Libya	551,150	11. People's Republic of China	645,897
12. Indonesia	501,838	12. Canada	520,666	12. Indonesia	550,319
13. People's Republic of China	474,500	13. Indonesia	477,055	13. Canada	488,680
14. Algeria	368,139	14. Algeria	350,753	14. Algeria	383,816
15. Mexico(1)	238,271	15. Mexico	294,254	15. Mexico	327,285
16. Qatar	189,348	16. Qatar	159,482	16. Qatar	178,120
17. Argentina	151,110	17. Australia	149,873	17. Australia	152,522
18. Australia	140,396	18. Argentina	144,364	18. Argentina	145,561
19. Romania	107,964	19. Oman	124,600	19. Oman	133,795
20. Oman	106,046	20. Romania	108,739	20. Egypt	120,180
TOTAL FREE WORLD	16,542,571	TOTAL FREE WORLD	15,169,574	TOTAL FREE WORLD	16,575,174
TOTAL WORLD	20,537,727	TOTAL WORLD	19,497,604	TOTAL WORLD	21,191,540

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(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: U.S. Energy Information Administration, World Crude Oil Production Annual

Section IV
Table 2a

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1977	Nation	1978	Nation	1979
1. U.S.S.R.(1)	3,991,050	1. U.S.S.R.	4,093,475	1. U.S.S.R.	4,187,280
2. Saudi Arabia(2)	3,290,000	2. United States(1)	3,175,927	2. Saudi Arabia	3,376,615
3. United States(1)	3,009,265	3. Saudi Arabia(2)	3,113,470	3. United States(1)	3,114,545
4. Iran	2,080,051	4. Iran	1,900,555	4. Iraq	1,269,105
5. Iraq	909,945	5. Iraq	959,585	5. Iran	1,156,320
6. Venezuela	816,818	6. Venezuela	790,418	6. Venezuela	859,940
7. Nigeria	765,473	7. People's Republic of China	731,825	7. Nigeria	840,230
8. Libya	753,178	8. Libya	727,445	8. Kuwait	807,745
9. United Arab Emirates	729,506	9. Nigeria	697,150	9. People's Republic of China	774,530
10. People's Republic of China	653,350	10. Kuwait(2)	680,725	10. Libya	763,580
11. Kuwait(2)	650,795	11. United Arab Emirates	668,680	11. United Arab Emirates	668,315
12. Indonesia	615,123	12. Indonesia	597,505	12. Indonesia	580,715
13. Canada	482,021	13. Canada(1)	483,260	13. United Kingdom	572,320
14. Algeria	409,864	14. Algeria(1)	447,125	14. Canada(1)	546,040
15. Mexico	358,090	15. Mexico(1)	440,555	15. Mexico(1)	533,265
16. United Kingdom	271,653	16. United Kingdom	394,930	16. Algeria(1)	415,005
17. Qatar	162,316	17. Qatar	176,537	17. Neutral Zone	207,320
18. Argentina	157,248	18. Neutral Zone	170,090	18. Egypt	191,625
19. Australia	157,155	19. Egypt	169,360	19. Brunei-Malaysia	187,975
20. Egypt	150,925	20. Argentina	165,195	20. Qatar	185,420
TOTAL FREE WORLD	17,108,078	TOTAL FREE WORLD	17,195,001	TOTAL FREE WORLD	17,825,515
TOTAL WORLD	21,900,695	TOTAL WORLD	22,158,251	TOTAL WORLD	22,970,545

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(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: 1977-1978-U.S. Energy Information Administration, World Crude Oil Production Annual.
1979-Central Intelligence Agency, International Energy Statistical Review.

Section IV
Table 2b

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1980	Nation	1981	Nation	1982
1. U.S.S.R.	4,282,200	1. U.S.S.R.	4,303,350	1. U.S.S.R.	4,388,760
2. Saudi Arabia(2)	3,524,946	2. Saudi Arabia(2)	3,513,125	2. United States(1)	3,156,715
3. United States(1)	3,146,502	3. United States(1)	3,128,780	3. Saudi Arabia(2)	2,304,975
4. Iraq	920,124	4. Mexico(1)	843,880	4. Mexico	1,086,970
5. Venezuela	792,390	5. Venezuela	769,420	5. Iran	808,110
6. People's Republic of China	775,188	6. People's Republic of China	738,760	6. United Kingdom	772,705
7. Nigeria	753,228	7. United Kingdom	661,015	7. China	740,585
8. Mexico(1)	708,942	8. Indonesia	585,640	8. Venezuela	690,215
9. Libya	669,780	9. United Arab Emirates	547,500	9. Indonesia	488,735
10. United Arab Emirates	622,932	10. Nigeria	527,425	10. Nigeria	472,675
11. Iran	680,292	11. Iran	504,065	11. Canada	452,965
12. United Kingdom	592,554	12. Canada(1)	469,025	12. United Arab Emirates	443,110
13. Indonesia	576,816	13. Libya	415,005	13. Libya	422,670
14. Canada(1)	521,184	14. Iraq	362,445	14. Iraq	354,780
15. Kuwait(2)	508,374	15. Kuwait(2)	345,655	15. Algeria	259,150
16. Algeria(1)	373,320	16. Algeria	293,095	16. Kuwait(2)	244,915
17. Egypt	217,770	17. Egypt	218,270	17. Egypt	242,725
18. Neutral Zone	199,104	18. Norway	182,865	18. Norway	189,070
19. Norway	193,248	19. Argentina	181,040	19. Argentina	176,660
20. Brunei-Malaysia	189,588	20. Brunei-Malaysia	156,585	20. Brunei-Malaysia	167,900
TOTAL FREE WORLD	16,559,304	TOTAL FREE WORLD	15,181,445	TOTAL FREE WORLD	14,116,160
TOTAL WORLD	21,765,654	TOTAL WORLD	20,373,570	TOTAL WORLD	19,395,155

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(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: Central Intelligence Agency, International Energy Statistical Review

Section IV
Table 2c

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

	Nation	1983		Nation	1984		Nation	1985
1.	U.S.S.R.	4,363,940	1.	U.S.S.R.	4,344,420	1.	U.S.S.R.	4,288,385
2.	United States(1)	3,170,999	2.	United States(1)	3,249,696	2.	United States(1)	3,274,553
3.	Saudi Arabia (2)	1,776,455	3.	Saudi Arabia(2)	1,626,504	3.	Saudi Arabi(2)	1,200,850
4.	Mexico	979,660	4.	Mexico	1,005,036	4.	Mexico	997,545
5.	Iran	909,580	5.	United Kingdom	927,810	5.	United Kingdom	924,545
6.	United Kingdom	839,135	6.	China	834,480	6.	China	911,040
7.	China	769,005	7.	Iran	800,442	7.	Iran	824,170
8.	Venezuela	653,350	8.	Venezuela	663,558	8.	Venezuela	591,665
9.	Canada	529,250	9.	Indonesia	536,556	9.	Nigeria	534,360
10.	Indonesia	505,525	10.	Canada	516,426	10.	Canada	531,805
11.	Nigeria	452,965	11.	Nigeria	509,838	11.	Iraq	524,505
12.	United Arab Emirates	408,070	12.	Iraq	440,298	12.	Indonesia	450,775
13.	Libya	392,740	13.	United Arab Emirates	401,502	13.	United Arab Emirates	418,290
14.	Iraq	336,530	14.	Libya	392,718	14.	Libya	390,185
15.	Kuwait(2)	321,565	15.	Kuwait(2)	333,792	15.	Egypt	319,010
16.	Algeria	255,135	16.	Egypt	302,682	16.	Kuwait(2)	314,630
17.	Egypt	251,485	17.	Norway	256,200	17.	Norway	286,525
18.	Norway	224,110	18.	Algeria	233,508	18.	Algeria	235,425
19.	Brunei-Malaysia	190,895	19.	India	173,248	19.	India	224,475
20.	Argentina	174,835	20.	Australia	180,072	20.	Brazil	211,700
TOTAL FREE WORLD		13,988,260	TOTAL FREE WORLD		14,420,748	TOTAL FREE WORLD		14,136,588
TOTAL WORLD		19,274,555	FREE WORLD		19,753,368	TOTAL WORLD		19,488,948

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(1) Includes lease condensate.
(2) Excludes Neutral Zone production.

Source: U.S. - Energy Information Administration, Petroleum Supply Annuals
Rest of World - Central Intelligence Agency, International Energy Statistical Review

Section IV
Table 2d

WORLD CRUDE OIL PRODUCTION--TWENTY LEADING NATIONS
(Thousands of Barrels)

	Nation	1986		Nation	1987
1.	U.S.S.R.	4,290,210	1.	U.S.S.R.	4,354,450
2.	United States(1)	3,168,252	2.	United States(1)	3,047,378
3.	Saudi Arabia(2)	1,795,070	3.	Saudi Arabia	1,484,455
4.	China	953,745	4.	China	953,745
5.	United Kingdom	915,420	5.	Mexico	927,465
6.	Mexico	887,315	6.	Iran	894,616
7.	Iran	710,290	7.	United Kingdom	853,370
8.	Iraq	626,340	8.	Iraq	757,740
9.	Venezuela	575,240	9.	Venezuela	573,780
10.	Canada	537,280	10.	Canada	569,400
11.	Nigeria	533,265	11.	United Arab Emirates	530,710
12.	Kuwait(2)	490,560	12.	Nigeria	469,390
13.	United Arab Emirates	485,815	13.	Indonesia	434,715
14.	Indonesia	461,360	14.	Kuwait	377,410
15.	Libya	415,005	15.	Norway	344,195
16.	Norway	306,965	16.	Egypt	277,040
17.	Egypt	296,745	17.	Algeria	231,775
18.	Algeria	244,915	18.	India	222,285
19.	India	228,125	19.	Brazil	206,590
20.	Brazil	209,875	20.	Oman	203,305
TOTAL FREE WORLD		14,926,362	TOTAL FREE WORLD		14,858,413
TOTAL WORLD		20,329,092	TOTAL WORLD		20,345,823

(1) Includes lease condensate.
(2) Excludes Neutral Zone production.

Source: U.S.--U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.
Rest of World--Central Intelligence Agency, International Energy Statistical Review.

Section IV
Table 3

U.S. STRIPPER WELLS AND STRIPPER WELL PRODUCTION

Year	Number of Stripper Wells (as of Dec. 31)	Total Production from Stripper Wells (000 barrels)	Average Production Per Well (B/D)	Total(1) U.S. Crude Oil Production (000 barrels)	Stripper Percent of Total Production
1947	294,672	279,659	2.6	1,856,987	15.1
1948	310,892	352,899	3.1	2,020,185	17.5
1949	313,970	350,871	3.1	1,841,940	19.0
1950	321,287	375,551	3.2	1,973,574	19.0
1951	320,689	341,241	2.9	2,247,711	15.2
1952	332,058	374,175	3.1	2,289,836	16.3
1953	332,552	383,947	3.2	2,357,082	16.3
1954	340,276	432,496	3.5	2,314,988	18.7
1955	357,931	463,702	3.5	2,484,428	18.7
1956	370,489	485,637	3.6	2,617,283	18.6
1957	372,519	474,919	3.5	2,616,901	18.1
1958	373,870	511,842	3.8	2,449,016	20.9
1959	392,535	533,470	3.7	2,574,590	20.7
1960	403,323	577,151	3.9	2,574,933	22.4
1961	406,102	591,911	4.0	2,621,758	22.6
1962	406,051	579,410	3.9	2,676,189	21.7
1963	401,031	555,130	3.8	2,752,723	20.2
1964	394,107	534,567	3.7	2,786,822	19.9
1965	398,299	589,016	4.0	2,848,514	20.7
1966	380,549	485,166	3.5	3,027,763	16.0
1967	376,851	499,601	3.6	3,215,742	15.5
1968	367,205	485,162	3.6	3,329,042	14.6
1969	358,650	454,820	3.5	3,371,751	13.5
1970	359,130	441,287	3.4	3,517,450	12.5
1971	353,696	423,322	3.6	3,453,914	12.3
1972	359,471	411,925	3.1	3,455,368	11.9
1973	355,229	385,684	3.0	3,360,903	11.5
1974	366,095	411,936	3.1	3,202,585	12.9
1975	367,872	394,163	2.9	3,056,779	12.9
1976	365,733	392,191	2.9	2,976,180	13.2
1977	368,930	392,532	2.9	2,985,360	13.1
1978	374,635	391,633	2.9	3,178,216	12.3
1979	386,310	394,405	2.8	3,121,310	12.6
1980	395,176	401,095	2.8	3,146,519	12.7
1981	409,539	426,502	2.9	3,128,624	13.1
1982	416,493	441,951	2.9	3,156,715	14.0
1983	441,501	462,013	2.9	3,159,440	14.6
1984	452,543	463,459	2.8	3,249,696	14.3

(1) Includes lease condensate

Source: National Stripper Well Survey
Total Crude Oil Production, Department of Energy

U.S. STRIPPER WELLS AND STRIPPER WELL PRODUCTION

Year	Number of Stripper Wells (as of Dec. 31)	Total Production from Stripper Wells (000 barrels)	Average Production Per Well (B/D)	Total(1) U.S. Crude Oil Production (000 barrels)	Stripper Percent of Total Production
1985	458,447	455,884	2.7	3,274,553	13.9
1986	460,426	449,446	2.7	3,168,252	14.5
1987	451,787	446,837	2.7	3,047,378	14.7

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(1) Includes lease condensate.

Source: Stripper Well data from National Stripper Well Association, National Stripper Well Survey.
Total U.S. Crude Oil Production from Department of Energy, Energy Information Administration.

Section IV
Table 4

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Alabama	396	466	462	735	1,020	1,279	1,694	1,584	1,411	3,069
Alaska	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-
Arkansas	29,948	31,682	29,986	31,108	29,798	29,440	29,681	29,130	28,369	29,355
California	333,132	340,074	332,942	327,607	354,561	359,450	365,085	355,865	354,812	350,754
Colorado	15,702	17,862	23,587	23,303	27,823	30,381	36,402	46,206	52,653	58,516
Florida	259	290	441	487	596	591	543	548	495	479
Illinois	66,459	64,808	64,501	62,028	60,243	60,089	59,026	66,798	81,423	82,346
Indiana	6,095	6,974	9,696	10,699	11,100	12,037	12,823	11,204	10,988	11,513
Kansas	105,132	110,908	101,868	107,586	114,522	114,807	114,566	119,317	121,669	124,204
Kentucky	9,397	8,801	8,803	10,381	11,622	11,918	11,518	13,791	15,518	17,628
Louisiana	160,128	181,458	190,826	208,965	232,281	243,929	256,632	246,558	271,010	299,421
Michigan	16,215	16,871	16,517	15,826	13,927	13,251	12,285	12,028	11,266	10,740
Mississippi	34,925	45,761	37,966	38,236	37,039	36,310	35,620	34,240	37,741	40,824
Missouri	55	31	49	32	24	21	39	96	72	65
Montana	8,742	9,382	9,118	8,109	8,958	9,606	11,920	14,195	15,654	21,760
Nebraska	229	215	330	1,547	2,558	2,660	6,344	7,783	11,203	16,204
Nevada	-	-	-	-	-	-	-	33	64	64
New Mexico	40,926	47,969	47,645	47,367	52,719	58,681	70,441	74,820	82,958	87,893
New York	4,762	4,621	4,425	4,143	4,254	4,242	3,800	3,257	2,904	2,748
North Dakota	-	-	-	-	25	1,549	5,183	6,025	11,143	13,495
Ohio	3,108	3,600	3,483	3,383	3,140	3.350	3,610	3,880	4,353	4,785
Oklahoma	141,019	154,455	151,660	164,599	186,869	190,435	202,570	185,851	202,817	215,862
Pennsylvania	12,690	12,667	11,374	11,859	11,345	11,233	10,649	9,107	8,531	8,230
South Dakota	-	-	-	-	-	-	-	37	30	32
Tennessee	8	19	18	12	14	15	16	13	13	9
Texas	820,210	903,498	744,834	829,874	1,010,270	1,022,139	1,019,164	974,275	1,053,297	1,107,808
Utah	-	16	637	1,228	1,305	1,737	1,807	1,905	2,227	2,466
Virginia	61	33	43	21	12	10	8	7	4	4
Washington	-	-	-	-	-	-	-	-	-	-
West Virginia	2,617	2,692	2,839	2,808	2,757	2,602	3,038	2,902	2,320	2,179
Wyoming	44,772	55,032	47,890	61,631	68,929	68,074	82,618	93,533	99,483	104,830
Total(Mb)	1,857.0	2,020.2	1,841.9	1,973.6	2,247.7	2,289.8	2,357.1	2,315.0	2,484.4	2,617.3
Daily Ave(Mb)	5.1	5.5	5.0	5.4	6.2	6.3	6.5	6.3	6.8	7.2

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(1) Includes Lease Condensate

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section IV
Table 4a

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Alabama	5,406	5,887	5,524	7,329	6,931	7,473	9,175	8,498	8,064	8,030
Alaska	-	-	187	559	6,327	10,259	10,740	11,059	11,128	14,358
Arizona	-	12	25	73	73	39	68	64	97	132
Arkansas	31,047	28,700	26,329	30,117	29,246	27,649	27,406	26,737	25,930	23,824
California	339,646	313,672	308,946	305,352	299,609	296,590	300,908	300,009	316,428	345,295
Colorado	54,982	48,736	46,440	47,469	46,759	42,477	38,283	34,755	33,511	33,492
Florida	461	449	424	369	374	419	464	620	1,464	1,799
Illinois	77,083	80,275	76,727	77,341	76,818	78,796	74,796	70,168	63,708	61,661
Indiana	12,662	11,864	11,554	12,054	11,500	12,077	11,902	11,283	11,481	10,617
Kansas	123,614	119,942	119,543	113,453	112,241	112,076	109,107	106,252	104,733	103,738
Kentucky	17,029	17,509	27,272	21,147	18,344	17,789	18,344	19,772	19,386	18,066
Louisiana	329,896	313,891	362,666	400,832	424,962	477,153	515,057	549,698	594,853	674,318
Michigan	10,169	9,308	10,439	15,899	18,901	17,114	15,972	15,601	14,728	14,273
Mississippi	38,922	39,512	49,620	51,673	54,688	55,713	58,619	56,777	56,183	55,227
Missouri	65	84	75	75	72	55	53	65	73	97
Montana	27,172	27,957	29,857	30,240	30,906	31,648	30,870	30,647	32,778	35,380
Nebraska	19,586	20,373	22,881	23,825	24,369	24,894	21,846	19,113	17,216	13,850
Nevada	44	40	32	27	154	141	118	255	209	307
New Mexico	94,759	98,515	105,692	107,380	112,553	109,328	109,941	113,863	119,166	124,154
New York	2,677	1,763	1,970	1,813	1,658	1,589	1,679	1,874	1,632	1,735
North Dakota	13,259	14,259	17,824	21,992	23,652	25,181	25,030	25,731	26,350	27,126
Ohio	5,478	6,260	5,978	5,405	5,639	5,835	6,039	15,859	12,908	10,899
Oklahoma	214,661	200,699	198,090	192,913	193,081	202,732	201,962	202,524	203,441	224,839
Pennsylvania	8,179	6,472	6,170	6,009	5,643	5,302	5,083	5,113	4,922	4,337
South Dakota	54	58	151	281	233	169	215	247	219	239
Tennessee	7	7	6	20	17	14	16	10	11	7
Texas	1,073,867	940,166	971,978	927,479	939,191	943,328	977,835	989,525	1,057,706	1,056,706
Utah	4,367	24,811	39,959	37,594	33,118	31,029	33,435	28,575	25,298	24,112
Virginia	5	4	6	2	2	3	3	6	4	1
Washington	5	4	1	1	-	-	-	-	-	-
West Virginia	2,215	2,186	2,184	2,300	2,760	3,470	3,350	3,370	3,530	3,674
Wyoming	109,584	115,572	126,050	133,910	141,937	135,847	144,407	138,752	138,314	134,470
Total(Mb)	2,617.0	2,449.0	2,574.6	2,575.0	2,621.8	2,676.2	2,752.7	2,786.8	2,848.5	3,027.8
Daily Ave(Mb)	7.2	6.2	7.1	7.0	7.2	7.3	7.5	7.6	7.8	8.3

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(1) Includes Lease Condensate

Source: U.S. Bureau of Mines, Annual Petroleum Statements

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	7,348	7,635	7,701	7,263	7,832	9,934	11,677	13,323	13,477	14,706
Alaska	29,126	66,204	73,953	83,616	79,494	72,893	72,323	70,603	69,834	63,398
Arizona	2,924	3,370	2,433	1,784	1,236	993	804	740	635	519
Arkansas	21,075	19,464	18,049	18,035	18,263	18,519	18,016	16,527	16,133	18,097
California	359,219	375,496	375,291	372,191	358,484	347,022	336,075	323,003	322,199	326,021
Colorado	33,905	31,937	28,294	24,723	27,391	32,015	36,590	37,508	38,089	38,992
Florida	1,568	1,474	1,731	2,999	5,347	16,897	32,695	36,351	41,877	44,460
Illinois	59,142	56,391	50,724	43,747	39,084	34,874	30,669	27,553	26,067	26,272
Indiana	10,081	8,692	7,841	7,487	6,658	6,130	5,312	4,919	4,632	4,630
Kansas	99,200	94,505	88,716	84,853	78,532	73,744	66,227	61,691	59,106	58,714
Kentucky	15,535	14,036	12,924	11,575	10,692	9,702	8,687	7,837	7,556	7,483
Louisiana	774,527	817,426	844,603	906,907	935,243	891,827	831,524	737,324	650,840	606,501
Michigan	13,664	12,974	12,213	11,693	11,893	12,990	14,614	18,021	24,420	30,421
Mississippi	57,147	58,708	64,283	65,119	64,066	61,100	56,102	50,779	46,614	46,072
Missouri	75	65	67	66	66	60	60	56	57	61
Montana	34,959	48,460	43,954	37,879	34,599	33,904	34,620	34,554	32,844	32,814
Nebraska	13,373	13,183	12,106	11,451	10,062	8,705	7,240	6,611	6,120	6,182
Nevada	279	271	223	149	113	100	96	129	115	143
New Mexico	126,144	128,550	129,227	128,184	118,412	110,525	100,986	98,695	95,063	92,130
New York	1,972	1,532	1,256	1,194	1,126	1,018	967	896	875	857
North Dakota	25,315	25,040	22,703	21,998	21,653	20,624	20,235	19,697	20,452	21,725
Ohio	9,924	11,204	10,972	9,864	8,286	9,358	8,796	9,088	9,578	9,994
Oklahoma	230,749	221,623	224,729	223,574	213,313	207,633	191,204	177,785	163,123	161,426
Pennsylvania	4,387	4,160	4,448	4,093	3,798	3,441	3,282	3,478	3,264	3,019
South Dakota	211	187	158	160	233	219	275	494	472	447
Tennessee	7	6	32	309	398	198	201	769	682	598
Texas	1,119,962	1,133,380	1,151,775	1,249,697	1,222,926	1,301,686	1,294,671	1,262,126	1,221,929	1,189,523
Utah	24,048	23,504	23,295	23,370	23,630	26,570	32,656	39,363	42,301	34,304
Virginia	3	3	1	1	1	-	-	3	3	3
Washington	-	-	-	-	-	-	-	-	-	-
West Virgini	3,561	3,312	3,104	3,124	2,969	2,677	2,385	2,665	2,479	2,519
Wyoming	136,312	144,250	154,945	160,345	148,114	140,011	141,914	139,997	135,943	134,149
Total(Mb)	3,215.7	3.329.0	3,371.8	3,517.5	3,453.9	3,455.4	3,360.9	3,202.6	3,056.8	2,976.2
Daily Ave(Mb)	8.8	9.1	9.2	9.6	9.5	9.4	9.2	8.8	8.4	8.1

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(1) Includes lease condensate.

Source: U.S. Department of Interior, Bureau of Mines, Annual Petroleum Statements
U.S. Energy Information Administration, Annual Petroleum Statements

Section IV
Table 4c

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousands of Barrels)

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Alabama	18,252	19,829	19,161	22,153	20,680	20,014	18,746	19,804	21,581	21,122
Alaska	169,201	448,620	511,335	591,646	587,337	618,910	625,527	630,401	666,233	681,310
Arizona	427	418	472	406	357	335	237	215	175	161
Arkansas	20,202	20,329	18,869	18,210	18,352	18,849	18,849	18,730	19,044	15,778
California	349,609	347,181	352,268	356,923	384,958	401,572	404,688	412,020	423,877	406,665
Colorado	39,460	36,797	32,324	29,802	30,303	30,545	29,050	28,845	30,246	29,309
Florida	46,641	47,536	47,168	42,886	34,773	25,626	19,476	14,462	11,458	9,383
Illinois	25,608	23,362	21,793	22,702	24,090	27,710	29,200	28,868	30,265	27,245
Indiana	5,314	4,689	4,715	4,978	4,721	5,563	5,321	5,526	5,168	4,759
Kansas	57,496	56,586	56,995	60,151	65,810	70,525	71,594	75,729	75,407	67,034
Kentucky	6,581	5,724	5,514	5,946	6,548	7,349	7,886	7,777	7,790	6,475
Louisiana	562,905	532,740	489,687	469,141	449,315	458,395	479,569	515,268	508,239	512,108
Michigan	32,965	34,667	34,862	33,808	32,665	31,462	31,736	30,554	27,300	25,688
Mississippi	43,022	42,024	37,327	35,945	34,204	33,047	31,455	32,776	30,641	29,997
Missouri	60	54	91	130	226	202	269	285	243	110
Montana	32,680	30,467	29,957	29,584	30,813	30,921	29,225	29,761	29,768	27,072
Nebraska	5,968	5,862	6,068	6,240	6,671	6,872	6,380	6,452	6,943	7,098
Nevada	661	1,156	1,235	880	700	613	810	1,907	3,039	2,907
New Mexico	87,223	83,365	79,649	75,324	71,568	71,024	75,169	79,336	78,530	75,712
New York	824	852	855	824	841	834	831	840	1,071	853
North Dakota	23,273	24,812	30,914	40,337	45,424	47,271	50,690	52,652	50,857	45,628
Ohio	10,359	11,154	11,953	12,928	13,551	14,571	14,971	15,271	14,988	13,442
Oklahoma	156,382	150,456	143,642	150,140	154,056	158,621	158,604	168,385	162,739	149,105
Pennsylvania	2,715	2,887	2,874	2,651	3,729	4,282	4,282	4,284	4,851	3,783
South Dakota	632	869	846	765	973	1,158	1,172	1,340	1,596	1,586
Tennessee	820	593	614	743	918	1,132	1,056	920	786	644
Texas	1,137,880	1,074,050	1,018,094	977,436	945,132	925,296	902,676	904,774	888,831	839,606
Utah	33,113	31,368	27,728	24,978	25,860	22,440	29,534	34,689	40,792	39,172
Virginia	2	2	4	10	13	49	65	32	26	18
Washington	-	-	-	-	-	-	-	-	-	-
West Virginia	2,518	2,382	2,406	2,336	3,473	3,227	3,628	3,524	3,555	3,134
Wyoming	136,472	137,385	131,890	126,362	130,563	118,300	118,303	124,269	128,514	121,337
Total (Mb)	3,009.3	3,178.2	3.121.3	3,146.4	3,128.6	3,156.7	3,171.0	3,249.7	3,274.6	3,168.3
Daily Avg (Mbd)	8.2	8.7	8.6	8.6	8.6	8.6	8.7	8.9	9.0	8.7

(1) Includes lease condensate.

Source: U.S. Department of Energy, Energy Information Administration, Annual Petroleum Statements & Petroleum Supply Annuals.

Section IV
Table 4d

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousands of Barrels)

STATE	1987
Alabama	20,607
Alaska	715,955
Arizona	131
Arkansas	14,230
California	364,608
Colorado	28,802
Florida	8,270
Illinois	23,980
Indiana	3,738
Kansas	59,884
Kentucky	5,743
Louisiana	476,030
Michigan	25,972
Mississippi	28,103
Missouri	110
Montana	25,059
Nebraska	6,091
Nevada	3,112
New Mexico	72,328
New York	710
North Dakota	41,351
Ohio	12,153
Oklahoma	134,378
Pennsylvania	3,302
South Dakota	1,644
Tennessee	614
Texas	785,475
Utah	35,788
Virginia	17
Washington	--
West Virginia	2,835
Wyoming	115,267
Total (Mb)	3,047.4
Daily Avg (Mbd)	8.3

(1) Includes lease condensate.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1987.

U.S. STRIPPER WELL PRODUCTION BY STATE
(In Thousands of Barrels)
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	--	--	26.2	45.7	87.1	116.7	162.4	139.2	120.7	144.4
Arizona	--	2.6	1.8	0.1	3.7	5.3	5.7	6.7	4.8	4.5
Arkansas	7,719.3	7,238.9	7,281.5	6,658.6	6,747.8	5,043.7	5,198.9	6,171.5	7,753.9	7,231.2
California	51,737.9	58,245.3	5,530.8	61,451.6	77,497.2	60,574.2	52,245.7	51,409.6	49,558.2	45,520.8
Colorado	2,149.5	2,050.3	2,024.1	1,919.6	1,829.5	1,953.4	2,012.5	2,017.0	2,018.1	1,955.0
Illinois	42,860.8	38,304.3	3,128.2	28,826.6	26,023.9	25,214.7	24,936.2	23,614.2	21,159.7	20,324.9
Indiana	7,777.1	6,439.3	6,108.4	5,254.2	4,919.9	4,031.7	4,470.8	5,255.3	4,559.9	4,556.6
Kansas	55,835.4	51,857.1	0,447.9	45,948.7	44,615.0	43,706.7	44,433.0	44,189.8	44,461.1	43,947.6
Kentucky	11,301.0	10,531.0	9,128.0	7,314.0	6,463.9	6,182.8	6,172.8	5,420.8	4,712.7	4,548.8
Louisiana	8,466.8	8,077.8	7,598.8	7,324.7	7,501.8	7,574.2	8,176.0	7,739.5	7,916.1	7,680.7
Michigan	4,754.6	4,731.7	4,826.2	4,863.3	4,883.0	4,760.3	4,601.8	6,233.0	5,601.9	5,620.5
Mississippi	875.4	1,043.0	425.3	438.0	571.5	648.8	1,214.6	1,349.3	1,233.5	1,600.9
Missouri	66.3	66.1	59.3	59.8	56.0	57.0	60.3	59.5	53.3	54.3
Montana	7,454.5	1,919.3	1,910.4	2,143.9	2,024.0	3,578.7	2,947.3	3,255.3	2,804.7	2,829.5
Nebraska	1,056.1	1,191.0	1,121.7	1,196.4	1,378.8	1,545.4	1,758.0	2,012.3	2,024.8	1,865.7
New Mexico	10,201.5	10,187.3	0,074.8	10,223.8	10,835.4	11,082.5	11,141.1	11,547.2	11,830.8	12,067.9
New York	1,193.5	1,096.7	1,018.0	969.0	896.0	875.0	857.0	813.0	852.0	855.0
North Dakota	853.8	936.5	798.1	853.8	933.5	929.7	1,075.1	1,145.9	1,196.5	1,250.2
Ohio	6,904.8	5,800.2	6,550.6	6,157.4	6,361.6	6,704.6	6,996.1	7,251.2	7,808.1	8,366.8
Oklahoma	85,645.2	80,895.8	7,967.1	74,109.9	73,694.7	72,530.6	73,459.3	74,400.4	74,175.4	76,000.5
Pennsylvania	4,015.0	3,798.0	3,441.0	3,282.0	3,399.0	3,199.0	2,950.0	2,659.4	2,564.5	2,816.7
South Dakota	--	27.9	25.8	26.3	21.0	18.0	20.5	14.5	16.5	22.3
Tennessee	11.8	29.9	24.5	44.8	107.8	125.6	140.4	194.1	269.9	387.5
Texas	123,736.6	122,417.4	16,635.7	112,246.9	126,386.9	126,018.3	129,699.8	127,886.4	131,210.9	136,590.2
Utah	90.3	82.7	97.1	132.0	123.5	98.2	261.8	136.4	134.5	180.0
Virginia	0.9	0.6	0.1	0	2.8	3.0	2.7	1.7	2.4	3.7
West Virginia	3,124.0	2,969.0	2,677.0	2,407.0	2,673.0	2,478.0	2,400.0	2,384.0	2,255.2	2,381.9
Wyoming	3,455.3	3,382.3	2,996.4	1,785.1	1,897.9	5,107.0	4,790.7	5,224.7	5,333.3	5,597.0
U.S. TOTAL	441,287.2	423,322.1	41,924.9	385,683.5	411,936.0	394,162.9	392,190.5	392,531.9	391,633.1	394,405.1

Source: Interstate Oil Compact Commission and National Stripper Well Association.

U.S. STRIPPER WELL PRODUCTION BY STATE
(In Thousands of Barrels)
(As of January 1)

State	1981	1982	1983	1984	1985	1986	1987	1988
Alabama	124.8	121.9	157.7	172.5	171.8	189.0	190.8	193.3
Arizona	15.8	22.6	23.9	25.6	29.0	28.1	25.5	30.1
Arkansas	5,689.5	5,465.0	5,131.9	7,117.9	5,653.3	5,285.8	5,113.5	4,888.2
California	44,109.7	54,803.8	55,419.4	55,993.3	57,124.5	41,573.4	37,181.7	37,795.8
Colorado	1,989.2	2,158.7	2,203.7	3,629.8	3,329.6	2,682.3	6,216.4	7,323.4
Illinois	20,166.5	22,238.4	23,989.1	25,889.5	25,983.9	27,718.6	24,157.2	21,682.2
Indiana	4,019.4	4,781.2	4,567.9	4,336.4	4,401.2	4,103.9	3,827.3*	3,657.2*
Kansas	44,454.1	45,010.4	47,629.1	48,267.4	48,664.8	50,861.4	61,434.9	57,802.8
Kentucky	4,572.5	4,479.2	5,143.6	5,521.9	6,630.2	6,696.0	5,514.3	4,881.7
Louisiana	7,657.3	9,011.5	9,172.0	9,000.0	9,844.0	9,000.0	10,059.3	8,809.5
Michigan	4,717.0	2,448.5	2,820.1	3,144.9	3,228.1	3,272.2	2,781.7*	2,674.0
Mississippi	1,890.4	3,804.7	2,236.5	1,286.2	1,330.2	1,721.3	1,121.0	1,270.0
Missouri	127.4	226.2	52.5	270.8	270.9	250.0	182.3	100.9
Montana	2,710.1	2,748.0	2,881.0	3,103.8	2,577.1	2,936.6	2,709.2	2,650.9
Nebraska	2,236.5	2,510.3	2,878.6	3,418.0	2,974.4	2,947.3	2,617.2	2,687.7
New Mexico	12,924.4	13,462.8	14,207.2	14,722.3	15,016.0	15,366.5	14,747.5	14,377.8
New York	824.0	849.0	719.0	774.3	679.9	600.6	488.9	511.3
North Dakota	1,225.1	1,386.1	1,492.5	1,537.3	1,755.7	1,905.2	1,692.8	1,833.3
Ohio	9,049.5	9,485.9	10,199.4	10,479.8	10,689.8	10,491.3	9,766.6	8,828.8
Oklahoma	79,945.0	83,248.7	94,237.0	94,430.5	94,045.6	91,841.8	95,902.8	109,081.6
Pennsylvania	2,650.5	3,606.0	3,717.9	3,950.5	4,241.7	4,257.4	3,356.1	2,870.1
South Dakota	24.7	39.3	55.4	43.9	82.1	65.3	34.5	57.4
Tennessee	293.4	290.5	N.A	583.7	510.3	450.8	474.6	444.8
Texas	141,825.2	145,939.8	143,928.7	153,688.5	152,719.8	158,738.5	147,986.4	141,704.3
Utah	220.3	376.7	N.A	542.7	1,088.8	1,550.3	877.8	935.4
Virginia	9.5	13.2	49.4	21.6	27.2	20.7	14.1	15.9
West Virginia	2,312.6	2,607.1	2,683.0	3,116.5	3,270.0	3,346.0	2,988.0	2,765.2
Wyoming	5,210.5	5,366.9	6,354.5	6,944.0	7,118.8	7,983.4	7,984.0	6,963.2
U.S. TOTAL	401,095.2	426,502.4	441,951.0	462,013.5	463,458.7	455,883.8	449,446.5	446,836.8

* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

OIL VOLUME, VALUE, AND REVENUES RECEIVED FROM ONSHORE FEDERAL AND INDIAN LANDS

	Federal			Indian		
Year	Volume (000 bbl)	Market Value (000 $)	Oil Revenues Received (000 $)	Volume (000 bbl)	Market Value (000 $)	Oil Revenues Received (000 $)
1920-1987	7,477,100.8	$50,245,131.6	$6,311,978.2	1,251,718.5	$7,800,672.5	$1,103,468.1
1980	149,699.3	3,275,608.5	413,403.2	21,991.8	449,435.0	67,185.9
1981	155,573.7	4,891,778.8	604,783.0	21,944.9	705,243.0	103,919.4
1982	149,612.8	4,273,036.0	524,530.2	19,809.9	611,292.2	92,559.8
1983	151,456.8	4,118,421.3	523,898.7	20,083.2	593,094.9	89,727.6
1984	152,339.4	4,086,190.8	519,046.6	21,801.3	584,887.1	75,973.0
1985	169,968.7	4,117,255.9	492,367.9	20,432.6	519,968.8	75,026.0
1986	157,297.5	2,227,484.7	268,689.6	19,977.9	295,214.3	42,420.4
1987	149,977.5	2,389,418.1	289,069.7	18,989.9	321,775.0	45,813.8

Source: U.S. Department of Interior, MMS--MINERAL REVENUES: The 1987 Report on Receipts from Federal and Indian Leases.

Section IV
Table 7

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1960		1970		1980	
Company	Production	Company	Production	Company	Production
Texaco	477.6	Standard of New Jersey	946.0	Exxon	787.0
Standard of New Jersey	439.0	Texaco	808.0	Standard of Ohio	715.8
Gulf	386.2	Gulf	626.0	Atlantic Richfield	555.7
Shell	354.9	Shell	595.0	Shell	511.0
Standard of California	297.8	Standard of California	474.4	Standard of Indiana	464.0
Standard of Indiana	286.0	Standard of Indiana	466.0	Texaco	413.0
Phillips	222.5	Atlantic Richfield	405.7	Gulf	364.2
Socony-Mobil	204.1	Mobil	385.0	Standard of California	335.0
Continental	171.0	Getty	317.0	Mobil	318.0
Sinclair	139.0	Union	314.0	Getty	271.0
Cities Service	125.2	Phillips	270.2	Phillips	269.7
Sun	114.1	Sun	258.8	Sun	206.1
Ohio Oil (Marathon)	104.8	Cities Service	202.7	Union	173.4
Union	102.9	Continental	188.0	Marathon	168.3
Atlantic Refining	97.7	Marathon	174.9	Cities Service	154.7
Tidewater	89.7	City of Long Beach(1)	163.5	Conoco	148.0
Amerada	80.9	Amerada Hess	95.7	Amerada Hess	88.3
Superior	79.7	Tenneco	87.0	Tenneco	79.2
Sunray Mid-Continent	71.2	Superior	65.2	City of Long Beach(1)	72.6
Skelly	69.0	Louisiana Land & Exploration	62.0	El Paso	72.3

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(1) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with Arco, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1983	
Company	Production
Exxon	781.0
Atlantic Richfield	652.8
Standard of Ohio	612.0
Shell	524.0
Standard of Indiana	403.0
Texaco	346.0
Gulf	319.1
Standard of California	317.6
Mobil	304.0
Phillips	288.0
Getty	283.8
Sun	204.6
Unocal (Union)	170.4
U.S. Steel	157.3
Occidental	148.0
DuPont	116.0
Tenneco	90.4
Amerada Hess	74.1
City of Long Beach(1)	72.1
Union Pacific	63.0
U.S. TOTAL	10,299.0

1984	
Company	Production
Exxon	778.0
Texaco(2)	673.8
Atlantic Richfield	654.7
Chevron (Standard of California)(3)	646.1
Standard of Ohio	634.4
Shell	534.0
Standard of Indiana	409.0
Mobil(4)	365.6
Phillips(5)	347.9
Sun	194.1
U.S. Steel(6)	174.1
Unocal	168.8
Occidental	150.0
DuPont	120.0
Tenneco	98.6
City of Long Beach(1)	78.6
Amerada Hass	72.7
Union Pacific	68.8
El Paso	53.8
Mitchell	50.0
U.S. TOTAL	10,554.0

1985	
Company	Production
Exxon	768.0
Standard Oil (Ohio)	719.7
Atlantic Richfield	647.7
Taxaco	640.0
Chevron	587.1
Shell	530.0
Amoco (Std. of Ind.)	401.1
Mobil	352.0
Phillips	346.0
Sun	195.1
Unocal	170.9
U.S. Steel	160.2
Occidental	147.6
DuPont	120.0
Tenneco	101.4
City of Long Beach(1)	81.7
Amerada Hess	72.0
Union Pacific	67.9
El Paso	64.7
Santa Fe	49.9
U.S. TOTAL	10,636.0

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(1) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with Arco, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

(2) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figure includes 100% of Getty's estimated annualized production.

(3) Standard Oil of California acquired the Gulf Corporation on June 15, 1984, and on July 1, 1984 Standard changed its name to Chevron. Chevron's figure includes Gulf's 1984 full-year production.

(4) Mobil acquired Superior on September 28, 1984. Mobil's figure includes 100% of Superior's estimated annualized production.

(5) Phillips acquired Aminoil from R.J. Reynolds on October 26, 1984. Phillips' figure includes 100% of Aminoil's estimated annualized production.

(6) U.S. Steel acquired the U.S. assets of Husky Oil Ltd. on May 31, 1984. U.S. Steel's figure includes 100% of Husky's estimated annualized production of its U.S. assets.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1985, Discussion Paper #014R.

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1986		1987	
Company	Production	Company	Production
Exxon	761.0	BP America (Standard Oil)(4)	851.3
Standard Oil	726.6	Exxon	756.0
ARCO (Atlantic Richfield)	659.1	ARCO	665.0
Texaco	590.0	Shell	558.0
Shell	571.0	Texaco	540.0
Chevron	546.2	Chevron	506.9
Amoco	304.0	Amoco	394.0
Mobil	342.0	Mobil	338.0
Phillips	316.0	Phillips	287.0
USX (U.S. Steel)(1)	189.0	USX	171.1
Sun	171.3	Unocal	167.0
Unocal	167.9	Sun	159.3
Occidental	148.0	Occidental	123.0
DuPont	126.0	DuPont	107.0
Tenneco	104.1	Tenneco	100.9
City of Long Beach(2)	76.9	Burlington Northern	79.8
Union Pacific	71.2	Amerada Hess	68.5
Burlington Northern(3)	71.0	City of Long Beach(2)	67.8
Amerada Hess	68.8	Union Pacific	61.1
Enron	50.9	Enron	57.1
U.S. TOTAL	10,289.0	U.S. TOTAL	10,008.0

(1) On February 11, 1986 a subsidiary of U.S. Steel merged with Texas Oil and Gas (TXO). On July 8, 1986, in recognition of its major diversification into oil and gas businesses, U.S. Steel changed its name to USX Corporation.

(2) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with ARCO, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

(3) On December 13, 1985 Southland Royalty became a wholly owned subsidiary of Burlington Northern Inc. (BNI). BNI also is the parent company of El Paso Natural Gas.

(4) BP America was formed in 1987 through the acquisition of The Standard Oil Company by BP North America Inc.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion Paper #014R.

Section IV
Table 8

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	--	--	--	--	--	--	--	--	--	--	--	--	--	55.3
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	170.8	138.9
Arizona	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	23.6	23.8	22.4	23.2	21.8	20.8	20.0	18.6	17.2	16.3	15.6	13.8	12.2	13.1
California	38.3	36.5	35.9	34.2	33.7	32.5	31.8	30.1	28.8	27.1	25.5	23.4	23.1	22.3
Colorado	84.4	75.1	89.1	84.0	94.7	90.2	89.8	85.2	78.2	78.2	69.5	61.0	59.4	63.1
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	7.1	6.8	6.6	6.2	6.0	5.7	6.1	6.1	7.5	7.4	6.7	6.9	6.6	6.6
Indiana	7.6	7.5	9.3	9.2	8.7	8.8	8.9	7.5	7.3	7.4	7.8	6.8	6.4	6.4
Kansas	10.7	10.9	9.7	9.7	9.9	9.5	9.1	8.9	9.0	9.2	8.9	8.6	8.4	7.7
Kentucky	1.7	1.6	1.6	1.8	2.0	1.9	1.9	2.3	2.5	2.6	2.8	2.6	3.7	2.8
Louisiana	52.4	53.7	50.6	50.3	52.3	51.7	51.1	44.7	42.7	41.2	42.2	38.1	42.7	45.5
Michigan	12.6	13.0	12.3	11.2	9.8	9.3	8.4	8.1	7.5	7.1	6.8	6.4	7.1	10.3
Mississippi	100.2	102.5	74.3	68.2	59.2	54.7	51.1	45.5	45.8	47.3	45.5	47.5	58.5	51.5
Missouri	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Montana	8.5	8.6	8.0	6.9	7.3	7.6	9.4	11.4	12.6	17.0	20.2	19.9	21.0	21.8
Nebraska	10.5	10.7	16.4	42.4	35.0	26.0	53.5	47.4	45.8	54.8	57.8	50.3	47.2	43.0
Nevada	--	--	--	--	--	--	--	--	--	--	--	--	--	--
New Mexico	23.1	25.3	23.8	22.4	23.4	24.4	27.4	27.2	27.7	26.6	25.7	23.6	23.4	21.7
New York	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.2	0.3	0.3
North Dakota	--	--	--	--	--	99.6	83.5	46.0	59.3	54.2	42.5	39.9	38.5	42.3
Ohio	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.0	0.9
Oklahoma	7.4	8.0	7.7	8.1	9.0	8.8	9.0	7.9	8.2	8.4	8.1	7.3	7.2	6.9
Pennsylvania	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2
South Dakota	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Texas	21.1	22.4	17.5	18.3	21.0	20.4	19.7	18.0	18.4	17.9	16.1	13.6	14.1	13.3
Utah	--	--	--	--	--	--	--	--	--	--	75.7	182.7	180.1	137.6
Virginia	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Wyoming	28.7	33.7	27.5	32.9	34.6	32.6	40.0	42.5	40.4	40.5	41.1	42.4	47.2	50.3
Other	16.4	15.6	25.9	32.8	32.8	35.3	35.7	33.2	32.4	41.9	45.4	42.0	34.1	12.0
TOTAL	12.0	12.8	11.4	11.8	13.1	13.0	13.1	12.6	13.2	13.3	12.8	11.7	12.2	12.0

(1) Includes lease condensate.

Source: U.S. Bureau of Mines, Minerals Yearbook and Annual Petroleum Statement.

Section IV
Table 8a

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
Alabama	47.6	47.2	52.8	45.5	42.6	42.2	38.1	38.7	38.5	35.8	38.4	49.3	56.6
Alaska	559.2	573.6	555.2	549.4	539.6	609.9	961.4	1,407.7	1,171.2	1,190.1	1,161.6	1,088.3	1,029.3
Arizona	--	21.4	28.7	20.6	29.5	45.2	616.2	438.5	261.4	171.5	116.8	93.6	78.7
Arkansas	12.6	12.4	12.6	12.1	11.8	10.5	9.0	8.2	7.9	7.5	7.1	7.1	6.9
California	21.6	21.9	20.7	20.2	21.2	23.0	23.7	24.7	25.0	25.0	24.5	24.0	23.6
Colorado	63.4	56.3	50.7	47.3	46.9	42.6	45.3	49.1	42.6	37.8	42.2	47.5	51.4
Florida	--	104.4	110.5	109.3	140.7	123.2	103.5	94.8	106.6	156.5	212.3	419.7	619.9
Illinois	6.6	6.9	6.8	6.4	6.0	5.9	5.7	5.6	5.1	4.5	4.2	3.8	3.4
Indiana	5.8	5.8	5.6	5.4	5.9	5.5	5.5	5.2	5.1	5.0	4.8	4.2	3.3
Kansas	7.6	7.0	6.4	6.2	6.1	6.1	5.8	5.6	5.4	5.3	5.0	4.8	4.4
Kentucky	2.5	2.5	2.9	3.6	3.4	3.3	3.0	3.0	2.9	2.7	2.2	1.8	1.6
Louisiana	47.1	51.1	52.2	52.6	54.7	60.3	68.7	73.3	77.6	86.7	93.6	89.3	81.9
Michigan	12.0	10.9	10.3	10.2	9.9	9.6	9.2	8.6	8.2	7.8	7.8	9.2	10.8
Mississippi	50.7	56.8	61.3	59.0	60.4	59.8	61.3	62.2	68.4	63.2	56.5	53.0	50.4
Missouri	--	1.4	1.4	1.7	1.7	1.8	1.4	1.3	1.3	1.2	1.4	1.2	1.2
Montana	24.0	24.7	23.1	24.0	25.2	26.5	27.8	39.1	35.9	31.6	29.7	27.7	27.0
Nebraska	38.9	37.6	34.3	30.4	28.4	24.3	24.9	25.4	24.5	24.6	22.6	20.4	17.6
Nevada	--	96.6	80.8	154.8	81.8	88.5	66.5	57.0	50.9	40.8	41.3	45.5	43.8
New Mexico	20.8	19.1	18.3	18.1	18.4	19.7	20.8	20.9	20.8	20.4	18.8	17.5	16.1
New York	0.2	0.3	0.3	0.4	0.4	0.4	1.1	0.9	0.7	0.6	0.5	0.5	0.5
North Dakota	41.4	39.7	37.9	38.0	37.4	37.2	34.0	33.1	30.6	35.0	40.6	39.3	39.5
Ohio	0.9	0.9	1.1	3.1	2.6	2.1	1.9	2.0	1.9	1.8	1.5	1.7	1.6
Oklahoma	6.7	6.9	6.8	6.8	6.9	7.6	7.8	7.5	7.6	7.7	7.6	7.6	7.1
Pennsylvania	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
South Dakota	--	24.4	27.4	28.1	23.1	14.7	20.3	18.6	16.3	18.9	21.6	19.3	26.9
Tennessee	--	1.1	1.1	0.7	0.8	0.6	0.6	0.5	2.6	18.6	15.9	7.2	7.9
Texas	13.2	13.1	13.5	13.6	13.8	23.0	15.8	16.3	17.0	19.0	19.2	20.9	21.7
Utah	114.0	103.3	108.6	93.2	82.5	77.4	75.9	73.6	74.3	73.9	73.6	82.5	95.2
Virginia	--	1.6	1.5	2.3	1.6	0.7	2.7	1.8	0.5	0.5	0.9	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.5
Wyoming	50.6	48.1	52.1	49.1	47.0	44.6	44.0	46.8	49.1	48.1	44.5	42.7	46.9
Other	13.4	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	12.1	12.3	12.7	12.9	13.3	14.2	15.3	16.2	16.9	18.0	18.1	18.4	18.3

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(1) Includes lease condensate.

Source: U.S. Bureau of Mines, Minerals Yearbook and Annual Petroleum Statement

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Alabama	62.5	62.1	64.8	79.1	85.0	80.3	90.1	81.9	76.3	69.3	71.3	73.0
Alaska	989.4	947.2	897.5	1,935.6	3,805.3	3,765.9	3,853.4	2,298.8	2,231.1	2,550.3	2,691.3	1,868.3
Arizona	76.5	65.7	51.6	41.8	36.4	37.0	33.6	27.9	25.5	19.1	18.9	17.1
Arkansas	6.3	6.1	6.7	7.2	7.1	6.5	6.1	6.1	6.0	6.2	5.4	5.4
California	22.4	21.7	21.3	22.3	21.9	22.1	21.9	22.4	23.3	23.5	23.2	23.3
Colorado	49.2	45.1	40.4	36.9	32.1	26.4	23.5	28.5	26.9	17.3	14.7	15.2
Florida	703.8	822.4	849.5	903.1	1,037.7	1,143.6	993.0	814.3	570.8	389.5	286.3	210.7
Illinois	3.1	3.0	3.1	3.0	2.7	2.5	2.5	2.5	2.8	2.8	2.6	2.7
Indiana	3.1	2.8	2.6	2.9	2.5	2.4	2.5	2.3	2.5	2.3	2.2	2.0
Kansas	4.1	3.9	3.8	3.7	3.8	3.6	3.6	4.3	4.2	4.0	4.2	4.0
Kentucky	1.5	1.5	1.5	1.3	1.1	1.1	1.1	1.2	1.3	1.4	1.1	1.0
Louisiana	72.3	64.0	61.4	61.5	60.3	54.5	50.5	48.6	56.1	56.2	57.4	53.9
Michigan	12.4	17.0	22.4	23.5	24.4	24.6	21.0	20.3	19.0	17.7	17.1	14.6
Mississippi	54.0	56.9	56.6	47.0	40.0	32.9	26.3	29.7	34.3	31.6	35.0	24.2
Missouri	1.1	1.0	1.0	0.9	0.9	1.2	1.4	1.5	1.1	1.3	1.4	1.1
Montana	28.8	28.3	27.4	27.0	24.8	23.2	22.2	21.3	19.7	17.1	19.4	19.4
Nebraska	16.2	14.5	13.6	12.2	11.3	11.0	10.5	9.8	9.4	8.3	8.4	9.1
Nevada	47.1	42.0	43.4	120.7	186.3	188.0	120.2	NA	NA	NA	140.8	185.0
New Mexico	17.8	19.3	18.2	16.9	14.4	11.2	11.2	12.0	11.8	11.8	11.9	11.5
New York	0.5	0.5	0.5	0.5	0.9	0.5	0.4	0.4	0.4	0.4	0.5	0.6
North Dakota	37.3	32.2	33.3	40.2	34.7	34.4	39.6	48.4	45.6	37.2	42.3	37.7
Ohio	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5
Oklahoma	6.7	6.2	6.1	5.9	5.5	5.2	5.2	5.1	4.7	4.5	4.6	4.3
Pennsylvania	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6
South Dakota	46.7	37.5	30.2	30.9	30.9	25.8	21.9	22.2	24.4	22.9	26.5	26.5
Tennessee	19.1	11.5	8.4	9.0	5.5	5.1	5.2	5.1	4.8	4.2	3.2	2.7
Texas	21.7	20.9	20.2	19.2	17.8	16.6	10.5	14.3	13.5	12.6	12.1	11.6
Utah	104.4	96.6	74.7	68.6	62.8	53.3	41.7	45.9	38.8	49.5	52.7	57.5
Virginia	5.5	1.6	1.2	1.0	1.2	1.8	3.6	NA	NA	NA	NA	NA
Washington	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.6
Wyoming	47.1	41.1	39.6	37.1	35.3	33.9	29.0	30.9	27.5	28.6	29.4	29.2
Other	--	--	--	--	--	--	--	--	36.3	43.6	2.8	2.5
TOTAL	17.6	16.8	16.3	16.4	17.0	16.3	15.9	15.4	14.9	14.4	14.3	13.9

(1) Includes lease condensate.

Source: 1974-1980: U.S. Department of Energy, Energy Information Administration, Annual Petroleum Statements.
1981-1985: Calculated by API based on crude oil production from U.S. Department of Energy, Energy Information Administration divided by the number of producing wells from World Oil Magazine.

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1986	1987
Alabama	68.6	64.5
Alaska	1,683.1	1,613.1
Arizona	70.3	N.A.
Arkansas	4.3	4.6
California	25.5	21.9
Colorado	14.6	14.0
Florida	225.5	185.7
Illinois	2.3	2.0
Indiana	1.7	1.4
Kansas	3.8	3.4
Kentucky	0.8	0.7
Louisiana	57.0	43.8
Michigan	14.4	14.2
Mississippi	36.8	35.9
Missouri	0.7	1.5
Montana	18.9	17.0
Nebraska	10.6	9.0
Nevada	274.6	N.A.
New Mexico	11.3	10.8
New York	0.5	0.4
North Dakota	35.3	32.6
Ohio	1.2	1.1
Oklahoma	4.1	3.6
Pennsylvania	0.5	0.6
South Dakota	29.4	30.2
Tennessee	2.2	2.6
Texas	11.4	10.9
Utah	57.8	54.9
Virginia	1.5	1.6
Washington	N.A.	N.A.
West Virginia	0.5	0.5
Wyoming	28.0	28.8
TOTAL	13.9	13.5

(1) Includes lease condensate.

Source: Calculated by API based on crude oil production from the Department of Energy and number of producing wells for World Oil Magazine.

Section IV
Table 9

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1857	0	0	0	2	0	0	0	2
1858	0	0	0	4	0	0	0	4
1859	2	0	0	5	0	0	0	7
1860	500	0	0	8	0	0	0	508
1861	2,114	0	0	17	0	0	0	2,131
1862	3,057	12	0	23	0	0	0	3,092
1863	2,611	83	0	69	0	0	0	2,763
1864	2,116	90	0	98	0	0	0	2,304
1865	2,498	110	0	108	0	0	0	2,716
1866	3,598	175	0	126	0	0	0	3,899
1867	3,347	190	0	172	0	0	0	3,709
1868	3,646	200	0	144	0	0	0	3,990
1869	4,215	220	0	261	0	0	0	4,696
1870	5,261	250	0	288	0	0	0	5,799
1871	5,205	270	0	255	0	0	0	5,730
1872	6,293	308	0	276	0	0	0	6,877
1873	9,894	365	0	579	0	0	0	10,838
1874	10,927	169	0	837	0	0	0	11,933
1875	11,963	220	0	964	0	0	5	13,152
1876	9,133	312	0	1,599	0	0	7	11,051
1877	13,350	312	0	2,082	0	0	10	15,754
1878	15,397	312	0	2,690	0	0	18	18,417
1879	19,914	575	0	3,089	0	0	23	23,601
1880	26,286	350	0	3,356	0	0	26	30,018
1881	27,661	275	0	4,040	0	0	17	31,993
1882	30,511	275	0	5,064	0	0	15	35,865
1883	23,450	250	0	6,535	0	0	20	30,255
1884	24,218	250	0	11,473	0	0	28	35,969
1885	21,859	250	0	14,626	0	0	30	35,765
1886	28,065	584	0	18,556	0	0	38	47,243
1887	28,283	526	0	18,969	0	0	29	47,807
1888	27,612	695	0	23,821	0	0	37	52,165
1889	35,164	705	0	25,491	0	0	147	61,507
1890	45,824	795	0	29,844	0	0	170	76,633
1891	54,293	755	0	35,809	0	0	243	81,100
1892	50,515	780	0	37,133	0	0	311	88,739
1893	48,431	798	0	41,804	0	0	1,055	92,038
1894	49,344	829	0	37,976	0	0	1,188	89,337

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(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

Section IV
Table 9a

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1895	52,892	726	0	48,316	0	0	1,758	103,692
1896	60,960	727	47	50,371	0	0	2,094	114,199
1897	60,476	710	71	57,376	0	0	3,360	121,993
1898	55,364	758	71	64,961	0	0	3,825	124,979
1899	57,071	808	89	69,903	0	0	3,276	131,147
1900	63,621	913	274	80,126	0	0	4,203	149,137
1901	69,389	757	285	90,427	0	0	6,562	167,440
1902	88,767	531	327	87,115	0	0	5,043	181,809
1903	100,461	487	353	84,053	0	0	9,489	194,879
1904	117,081	553	416	88,746	0	0	11,112	217,948
1905	134,717	634	624	65,752	0	0	13,334	215,091
1906	126,494	569	1,033	71,376	0	0	13,761	213,263
1907	166,095	789	1,806	79,242	0	0	16,045	263,957
1908	178,527	528	4,890	84,111	0	0	17,201	285,287
1909	183,171	421	4,200	91,291	0	0	19,606	298,709
1910	209,557	316	5,055	93,817	0	0	18,998	327,763
1911	220,449	291	14,316	88,903	0	21	20,361	344,361
1912	222,935	243	18,794	90,615	0	214	19,622	352,443
1913	248,446	228	28,402	85,111	1,857	98	21,183	385,345
1914	265,763	215	29,992	87,104	2,910	754	21,786	407,544
1915	281,104	215	36,753	86,677	3,616	216	23,442	432,033
1916	300,767	195	44,935	82,056	4,477	412	24,630	457,500
1917	335,316	214	60,867	73,704	7,147	952	24,662	502,515
1918	355,928	305	70,183	42,598	8,623	1,942	23,911	503,515
1919	378,367	241	93,358	45,150	10,139	1,522	27,078	555,875
1920	442,929	196	164,137	39,181	12,230	1,046	29,145	688,884
1921	472,183	188	203,047	43,297	16,673	1,258	29,336	766,002
1922	557,531	179	195,487	51,736	22,247	1,197	30,499	858,898
1923	732,407	170	166,448	56,734	25,230	1,063	34,020	1,015,736
1924	713,940	161	166,340	65,481	32,373	1,133	34,866	1,014,318
1925	763,743	332	156,324	76,367	34,038	1,238	35,868	1,067,933
1926	770,874	364	157,594	94,974	35,842	1,197	35,981	1,096,823
1927	901,129	477	166,943	110,496	40,026	1,275	42,223	1,262,582
1928	901,474	624	205,641	122,970	44,174	1,850	48,026	1,324,774
1929	1,007,323	1,117	235,455	141,764	42,943	1,888	55,339	1,485,867
1930	898,011	1,522	229,024	176,984	46,742	2,012	57,569	1,411,904
1931	851,081	1,543	201,218	222,372	45,276	2,045	50,074	1,373,656
1932	785,159	1,044	200,555	218,032	50,308	1,901	53,244	1,310,298
1933	905,656	1,145	203,143	216,679	55,340	1,670	57,364	1,441,000
1934	908,065	1,411	234,673	247,248	65,825	1,552	62,696	1,521,474

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(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

Section IV
Table 9b

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1935	996,596	1,447	251,071	254,392	85,946	1,305	64,190	1,654,951
1936	1,099,687	1,500	262,975	261,058	97,789	1,282	67,245	1,791,540
1937	1,279,160	2,944	305,367	257,836	117,467	1,218	75,235	2,039,231
1938	1,214,355	6,966	301,464	267,064	119,808	1,608	76,772	1,988,041
1939	1,264,962	7,838	327,256	278,897	120,465	4,693	82,045	2,086,160
1940	1,353,214	8,591	312,942	284,094	102,691	6,532	81,743	2,149,821
1941	1,402,228	10,134	351,438	300,443	74,531	8,573	73,310	2,220,657
1942	1,386,645	10,365	255,151	295,536	102,753	8,316	34,334	2,093,100
1943	1,505,613	10,152	292,614	269,723	110,900	8,992	58,743	2,256,637
1944	1,677,904	10,099	381,747	331,649	147,496	9,452	33,942	2,592,289
1945	1,713,655	8,483	450,146	203,888	194,258	9,434	14,833	2,594,697
1946	1,733,939	7,586	516,167	214,046	256,369	9,091	8,232	2,745,430

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(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868
Pennsylvania	2	500	2,114	3,057	2,611	2,116	2,498(1)	3,598(1)	3,347(1)	3,646(1)
U.S. TOTAL	2	500	2,114	3,057	2,611	2,116	2,498	3,598	3,347	3,646

State	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878
California	NA	NA	NA	NA	NA	NA	175(2)	12	13	15
Ohio	NA	NA	NA	NA	NA	NA	200(2)	32	30	38
Pennsylvania	4,215(1)	5,261(1)	5,205(1)	6,293(1)	9,894(1)	10,927(1)	8,969(1)	8,969(1)	13,135(1)	15,164(1)
West Virginia	NA	NA	NA	NA	NA	NA	2,800(2)	172	172	180
U.S. TOTAL	4,215	5,261	5,205	6,293	9,894	10,927	11,963(2)	9,133	13,350	15,397

State	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888
California	20	40	100	129	143	262	325	377	678	690
Colorado	0	0	0	0	0	0	0	0	76	298
Kentucky	NA	NA	NA	161(2,3)	5(3)	4(3)	5(3)	5(3)	5(3)	5(3)
Ohio	20	39	34	40	47	90	662	1,783	5,023	10,011
Pennsylvania	19,685(1)	26,028(1)	26,376(1)	23,368	19,125	20,541	18,118	23,647	20,281	16,489(1)
West Virginia	180	179	151	128	126	90	91	102	145	119
U.S. TOTAL	19,914	26,286	27,661	30,511(4)	23,450	24,218	21,859	28,065	28,283	27,612

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(1) Includes New York.
(2) 1875 total U.S. production includes cumulative California production, 1861-1875; cumulative Ohio and West Virginia production, 1860-1875.
(3) Includes Tennessee.
(4) 1882 total U.S. production includes cumulative Kentucky production, 1860-1882.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section IV
Table 10a

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
California	303	307	324	385	470	706	1,209	1,253	1,903	2,257
Colorado	317	369	666	824	594	516	438	361	385	444
Illinois	1	1	1	1	1	(1)	(1)	(1)	1	(1)
Indiana	33	64	137	698	2,335	3,689	4,386	4,681	4,122	3,731
Kansas	1	1	2	5	18	40	44	114	81	72
Kentucky	5(2)	6(2)	9(2)	7(2)	3(2)	2(2)	2(2)	2(2)	(1)	6(2)
Ohio	12,472	16,125	17,740	16,363	16,249	16,792	19,545	23,941	21,561	18,739
Oklahoma	0	0	(1)	(1)	(1)	(1)	(1)	(1)	1	0
Pennsylvania	19,591	28,458(3)	31,424	27,149	19,283	18,078	18,231	19,379	17,983	14,743
Texas	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	66	546
West Virginia	544	493	2,406	3,810	8,446	8,577	8,120	10,020	13,090	13,615
Wyoming	0	0	0	0	0	2	4	3	4	6
U.S. TOTAL	35,164	45,824	54,293	50,515	48,431	49,344	52,892	60,960	60,476	55,634

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(1) Less than 500 barrels.
(2) Includes Tennessee.
(3) Includes New York.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
California	2,642	4,325	8,787	13,984	24,382	29,649	33,428	33,099	39,748	44,855
Colorado	390	317	461	397	484	501	376	328	332	380
Illinois	(1)	--	(1)	(1)	--	--	181	4,397	24,282	33,686
Indiana	3,848	4,874	5,757	7,481	9,186	11,339	10,964	7,674	3,283	3,283
Kansas	70	75	179	332	932	4,251	12,014(2)	21,718(2)	2,410	1,801
Kentucky	18(3)	62(3)	137(3)	185	554(3)	998(3)	1,217(3)	1,214(3)	821(3)	728
Louisiana	--	--	--	549	918	2,959	8,910	9,077	5,000	5,789
Michigan	--	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Missouri	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Ohio	21,142	22,363	21,648	21,014	20,480	18,877	16,347	14,788	12,207	10,859
Oklahoma	--	6	10	37	139	1,367	(5)	(5)	43,524	45,799
Pennsylvania	13,054	13,258	12,625	12,064	11,355	11,126	10,437	10,257	10,000	9,424
Texas	669	836	4,394	18,084	17,956	22,241	28,136	12,568	12,323	11,207
Utah	--	--	--	--	--	--	--	--	(4)	(4)
West Virginia	13,911	16,196	14,177	13,513	12,900	12,645	11,578	10,121	9,095	9,523
Wyoming	6	6	5	6	9	12	8	7	9	18
Other States	--	2	2	1	9	3	3	3	4	15
U.S. TOTAL	57,071	63,621	69,389	88,767	100,461	117,081	134,717	126,494	166,095	178,527

(1) Less than 500 barrels.
(2) Includes Oklahoma.
(3) Includes Tennessee.
(4) Included in Other States.
(5) Included in Kansas.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section IV
Table 10c

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
California	55,472	73,011	81,134	87,269	97,788	99,775	86,592	90,952	93,878	97,532
Colorado	311	240	227	206	189	223	208	197	121	143
Illinois	30,898	33,143	31,317	28,602	23,894	21,920	19,042	17,714	15,777	13,366
Indiana	2,296	2,160	1,695	970	956	1,336	876	769	760	878
Kansas	1,264	1,128	1,279	1,593	2,375	3,104	2,823	8,738	36,536	45,451
Kentucky	639	469	472	484	525	503	437	1,202	3,088	4,368
Louisiana	3,060	6,841	10,721	9,263	12,499	14,309	18,192	15,248	11,392	16,043
Michigan	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Missouri	(1)	(1)	(1)	--	(1)	(1)	(1)	(1)	--	--
Montana	--	--	--	--	--	--	--	45	100	69
Ohio	10,633	9,916	8,817	8,969	8,781	8,536	7,825	7,744	7,751	7,285
Oklahoma	47,859	52,029	56,069	51,427	63,579	73,632	97,915	107,072	107,508	103,347
Pennsylvania	9,299	8,795	8,248	7,838	7,917	8,170	7,838	7,593	7,733	7,408
Tennessee	--	--	--	--	--	--	--	1	12	8
Texas	9,534	8,899	9,526	11,735	15,010	20,068	24,943	27,645	32,413	38,750
Utah	(1)	(1)	(1)	--	--	--	--	--	--	--
West Virginia	10,745	11,753	9,796	12,129	11,567	9,680	9,265	8,731	8,379	7,867
Wyoming	20	115	187	1,572	2,407	3,560	4,246	6,234	8,978	12,596
Other States	6	4	8	4	11	8	14	8	10	8
U.S. TOTAL	183,171	209,557	220,449	222,935	248,446	265,763	281,104	300,767	335,316	355,928

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section IV
Table 10d

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Arkansas	--	(1)	10,473	12,712	36,610	46,028	77,398	58,332	40,005	32,096
California	101,183	103,377	112,600	138,468	262,876	228,933	232,492	224,673	231,196	231,811
Colorado	121	111	108	97	86	445	1,226	2,768	2,831	2,774
Illinois	11,960	10,774	10,043	9,383	8,707	8,081	7,863	7,760	6,994	6,462
Indiana	972	945	1,158	1,087	1,043	935	829	808	852	1,052
Kansas	33,048	39,005	36,456	31,766	28,250	28,836	38,357	41,498	41,069	38,596
Kentucky	9,278	8,738	9,013	8,973	8,069	7,407	6,759	6,274	6,719	7,359
Louisiana	17,188	35,714	27,103	35,376	24,919	21,124	20,272	23,201	22,818	21,847
Michigan	(1)	--	--	--	--	--	4	94	439	594
Missouri	(1)	(1)	(1)	(1)	(1)	--	--	--	--	--
Montana	90	340	1,509	2,449	2,782	2,815	4,091	7,727	5,058	4,015
Ohio	7,736	7,400	7,335	6,781	7,085	6,811	7,212	7,272	7,593	7,015
Oklahoma	86,911	106,206	114,634	149,571	160,929	173,538	176,768	179,195	277,775	249,857
Pennsylvania	8,137	7,438	7,418	7,425	7,609	7,486	8,097	8,961	9,526	9,956
Tennessee	15	14	12	10	8	10	24	43	60	46
Texas	79,366	96,868	106,166	118,684	131,023	134,522	144,648	166,916	217,389	257,320
Utah	--	(1)	--	--	00	(1)	(1)	(1)	(1)	(1)
West Virginia	8,327	8,249	7,822	7,021	6,358	5,920	5,763	5,946	6,023	5,661
Wyoming	13,172	16,831	19,333	26,715	44,785	39,498	29,173	25,776	21,307	21,461
Other States	12	13	12	13	18	13	12	8	7	6
U.S. TOTAL	378,367	442,929	472,183	557,531	732,407	713,940	763,743	770,874	901,129	901,474

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Arkansas	24,917	19,702	14,791	12,051	11,686	11,182	11,008	10,469	11,764	18,180
California	292,534	227,329	188,830	178,128	172,010	174,305	207,832	214,773	238,521	249,749
Colorado	2,358	1,656	1,545	1,136	919	1,139	1,560	1,650	1,605	1,412
Illinois	6,319	5,736	5,039	4,673	4,244	4,479	4,322	4,475	7,499	24,075
Indiana	981	994	840	806	737	838	777	822	844	995
Kansas	42,813	41,638	37,018	34,848	41,976	46,482	54,843	58,317	70,761	60,064
Kentucky	7,775	7,389	6,456	6,287	4,608	4,860	5,258	5,633	5,484	5,821
Louisiana	20,554	23,272	21,804	21,807	25,168	32,869	50,330	80,491	90,924	95,208
Michigan	4,528	3,911	3,789	6,910	7,942	10,603	15,776	11,928	16,628	18,745
Missouri	--	--	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Montana	3,980	3,349	2,830	2,457	2,273	3,603	4,603	5,868	5,805	4,946
Ohio	6,743	6,486	5,327	4,644	4,235	4,234	4,082	3,847	3,559	3,298
Oklahoma	225,004	216,486	180,574	153,244	182,251	180,107	185,288	206,555	228,839	174,994
Pennsylvania	11,820	12,803	11,892	12,412	12,624	14,478	15,810	17,070	19,189	17,426
Tennessee	19	21	6	5	5	10	15	(1)	(1)	(1)
Texas	296,876	290,457	332,437	312,478	402,609	381,516	392,666	427,411	510,318	475,850
Utah	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	11	12
West Virginia	5,574	5,071	4,472	3,876	3,815	4,095	3,902	3,847	3,845	3,684
Wyoming	19,314	17,868	14,834	13,418	11,227	12,556	13,755	14,582	19,166	19,022
Other States	7	7	7	16	30	41	50	63	66	70
U.S. TOTAL	1,007,323	898,011	851,081	785,159	905,656	908,065	996,596	1,099,687	1,279,160	1,214,355

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1939	1940	1941	1942	1943	1944	1945	1946
Alabama	--	--	--	--	--	43	181	380
Arkansas	21,238	25,775	26,327	26,628	27,600	29,418	28,613	28,375
California	224,354	223,881	230,263	248,326	284,188	311,793	326,482	314,713
Colorado	1,404	1,626	2,150	2,199	2,320	3,083	5,036	11,856
Florida	--	--	--	--	4	12	30	57
Illinois	94,912	147,647	132,393	106,391	82,260	77,413	75,094	75,297
Indiana	1,711	4,978	7,411	6,743	5,283	5,118	4,868	6,726
Kansas	60,703	66,139	83,242	97,636	106,178	98,762	96,415	97,218
Kentucky	5,621	5,188	4,762	4,534	7,883	9,621	10,325	10,578
Louisiana	93,646	103,584	115,908	115,785	123,592	129,645	131,051	143,669
Michigan	23,462	19,753	16,359	21,754	20,768	18,490	17,267	17,074
Mississippi	107	4,400	15,327	28,833	18,807	16,337	19,062	24,298
Missouri	40	44	47	36	36	45	45	51
Montana	5,960	6,728	7,526	8,074	7,916	8,647	8,420	8,825
Nebraska	2	276	1,898	1,237	635	417	305	293
Ohio	3,156	3,159	3,510	3,543	3,322	2,937	2,828	2,908
Oklahoma	159,913	156,164	154,702	140,690	123,152	124,616	139,299	134,794
Pennsylvania	17,382	17,353	16,750	17,779	15,757	14,118	12,515	12,996
Tennessee	50	24	12	9	10	9	8	10
Texas	483,528	493,209	505,572	483,097	594,343	746,699	754,710	760,215
Utah	4	3	4	--	--	--	--	--
Virginia	--	--	--	--	2	3	4	23
West Virginia	3,580	3,444	3,433	3,574	3,349	3,070	2,879	2,929
Wyoming	21,454	25,711	29,878	32,812	34,253	33,356	36,219	38,977
U.S. TOTAL	1,264,962	1,353,214	1,402,208	1,386,645	1,505,613	1,677,904	1,713,655	1,733,939

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

SECTION V. FINANCIAL

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Table 22. Worldwide Outlays for Petroleum Property Acquistions and Exploration and Development Activities for 30 Large Energy Companies

Table 23. Domestic Oil and Gas Finding Costs for 30 Large Energy Companies

Table 24. Worldwide Oil and Gas Finding Costs for 30 Large Energy Companies

AVERAGE HOURLY EARNINGS-TOTAL MINING AND MANUFACTURING VS. PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING
(Annual Average)

		Petroleum and Natural Gas Extraction				
Year	Total Mining	Total	Crude Petroleum and Natural Gas Fields	Field Service Workers	Total Manufac- turing	Petroleum Refining
1947	$1.47	N.A.	$1.40	N.A.	$1.22	$1.57
1948	1.66	N.A.	1.58	N.A.	1.33	1.79
1949	1.72	N.A.	1.69	N.A.	1.38	1.88
1950	1.77	N.A.	1.72	N.A.	1.44	1.94
1951	1.93	N.A.	1.85	N.A.	1.56	2.09
1952	2.01	N.A.	1.98	N.A.	1.65	2.20
1953	2.14	N.A.	2.10	N.A.	1.74	2.33
1954	2.14	N.A.	2.15	N.A.	1.78	2.38
1955	2.20	N.A.	2.20	N.A.	1.86	2.47
1956	2.33	N.A.	2.35	N.A.	1.95	2.66
1957	2.46	N.A.	2.47	N.A.	2.05	2.77
1958	2.47	$2.39	2.54	$2.24	2.11	2.84
1959	2.56	2.43	2.65	2.25	2.19	2.99
1960	2.61	2.46	2.69	2.26	2.26	3.02
1961	2.64	2.53	2.80	2.30	2.32	3.16
1962	2.70	2.60	2.83	2.41	2.39	3.19
1963	2.75	2.66	2.92	2.43	2.46	3.32
1964	2.81	2.65	2.95	2.43	2.53	3.37
1965	2.92	2.74	3.03	2.53	2.61	3.47
1966	3.05	2.87	3.13	2.70	2.72	3.60
1967	3.19	3.03	3.25	2.88	2.83	3.77
1968	3.35	3.22	3.39	3.11	3.01	3.94
1969	3.61	3.43	3.60	3.33	3.19	4.23
1970	3.85	3.57	3.83	3.40	3.36	4.49
1971	4.06	3.75	4.15	3.48	3.57	4.82
1972	4.41	4.00	4.49	3.67	3.81	5.25
1973	4.73	4.29	4.79	3.99	4.08	5.54
1974	5.21	4.82	5.33	4.56	4.41	5.96
1975	5.90	5.34	6.05	5.00	4.81	6.90
1976	6.42	5.76	6.59	5.40	5.19	7.75
1977	6.88	6.23	7.13	5.87	5.63	8.44
1978	7.67	7.01	8.05	6.60	6.17	9.32
1979	8.48	7.73	8.80	7.34	6.69	10.08
1980	9.18	8.55	9.71	8.19	7.27	10.94
1981	10.06	9.49	10.81	9.11	7.98	12.17
1982	10.82	10.32	11.94	9.78	8.50	13.30
1983	11.30	10.69	12.38	9.97	8.84	14.33
1984	11.58	10.66	12.78	9.89	9.17	14.57

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

AVERAGE HOURLY EARNINGS-TOTAL MINING AND MANUFACTURING VS. PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING
(Annual Average)

		Petroleum and Natural Gas Extraction				
Year	Total Mining	Total	Crude Petroleum and Natural Gas Fields	Field Service Workers	Total Manufacturing	Petroleum Refining
1985	$11.95	$11.04	$13.31	$10.13	$9.52	$15.25
1986	12.45	11.54	13.74	10.25	9.73	15.32
1987	12.45	11.42	14.04	9.98	9.91	15.72

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

NUMBER OF EMPLOYEES
PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING
(Annual Average in Thousands)

	Petroleum and Natural Gas Extraction		
Year	Crude Petroleum and Natural Gas Fields	Field Service Workers	Petroleum Refining
1947	164.0	N.A.	189.3
1948	173.6	N.A.	196.6
1949	173.1	N.A.	191.6
1950	166.8	N.A.	185.4
1951	169.1	N.A.	198.6
1952	177.2	N.A.	201.6
1953	181.3	N.A.	206.3
1954	184.7	N.A.	203.6
1955	189.0	N.A.	201.3
1956	192.3	N.A.	200.8
1957	194.5	N.A.	198.9
1958	192.4	135.0	190.4
1959	185.4	144.2	181.4
1960	178.2	131.1	177.2
1961	171.3	131.8	168.4
1962	167.6	130.4	160.5
1963	163.8	125.4	153.7
1964	160.4	130.7	149.6
1965	156.6	130.5	148.1
1966	152.5	129.2	148.2
1967	149.7	126.2	147.9
1968	148.1	127.5	150.1
1969	145.8	134.1	144.7
1970	144.2	125.9	153.7
1971	142.5	121.7	152.7
1972	142.7	125.5	152.3
1973	142.1	135.6	149.9
1974	148.5	156.0	155.4
1975	159.5	176.2	154.2
1976	165.0	195.3	157.1
1977	174.8	229.7	159.5

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

PETROLEUM INDUSTRY EMPLOYMENT(1)
(In Thousands)

Year	Extraction(2)	Refining	Paving and Roofing	Oil Pipelines	Gas Production and Distribution	Wholesale	Retail	Total
1977	381.4	159.5	31.6	18.5	158.8	229.7	628.7	1,608.2
1978	429.3	164.1	32.3	19.6	163.5	229.4	628.0	1,666.2
1979	474.2	165.2	32.6	20.1	167.1	225.4	576.9	1,661.5
1980	559.7	154.8	31.0	21.3	168.0	223.9	560.8	1,719.5
1981	692.1	172.8	28.9	21.8	174.0	231.5	562.2	1,883.3
1982	708.3	164.2	25.0	21.3	176.9	222.6	559.0	1,877.3
1983	597.8	158.2	26.3	20.1	173.5	210.9	556.2	1,743.0
1984	606.5	151.1	26.7	19.1	173.2	208.3	574.7	1,759.6
1985	582.9	141.4	26.3	18.7	174.8	205.9	588.5	1,738.5
1986	450.0	131.1	26.1	18.1	167.4	200.5	596.0	1,589.7
Jan.	557.8	134.3	23.6	18.5	171.6	200.6	582.7	1,688.9
Feb.	535.4	133.5	23.3	18.2	170.1	200.1	579.9	1,660.5
Mar.	506.5	133.5	24.4	18.0	167.7	200.1	583.9	1,634.1
Apr.	471.3	133.1	26.2	18.0	166.2	199.9	587.9	1,602.6
May	444.6	132.8	27.4	17.9	166.7	200.9	594.1	1,584.4
Jun.	434.4	133.0	27.6	18.4	167.3	201.6	601.0	1,583.4
Jul.	430.5	132.5	27.7	18.7	169.9	202.9	604.4	1,586.6
Aug.	417.4	131.2	28.0	18.4	169.3	203.1	608.4	1,575.8
Sep.	404.5	129.0	27.6	18.1	163.4	201.0	605.0	1,548.6
Oct.	402.9	127.7	27.0	17.9	164.4	199.4	600.5	1,539.8
Nov.	401.8	127.1	26.1	17.8	166.2	199.2	600.4	1,537.6
Dec.	398.2	125.2	23.9	17.6	165.8	197.9	604.3	1,532.9
1987	405.2	126.7	26.3	18.2	165.7	198.4	609.6	1,550.1
Jan.	393.7	126.0	23.1	17.8	164.7	196.6	603.9	1,525.8
Feb.	388.8	125.7	23.3	17.8	164.0	196.4	600.8	1,516.8
Mar.	386.3	126.0	24.3	17.9	163.8	195.7	599.8	1,513.8
Apr.	389.5	125.8	25.9	17.8	164.0	196.1	602.3	1,521.4
May	393.8	126.2	27.5	18.0	164.6	197.0	609.3	1,536.4
Jun.	400.5	127.3	28.2	18.5	167.8	198.6	614.8	1,555.7
Jul.	406.7	127.8	27.9	18.7	168.9	199.6	618.2	1,567.8
Aug.	412.4	127.8	28.2	18.7	168.5	200.1	618.0	1,573.7
Sep.	416.6	127.0	28.2	18.4	166.1	199.6	612.9	1,568.8
Oct.	423.8	127.0	27.8	18.3	165.5	199.6	610.4	1,572.4
Nov.	424.3	127.1	26.6	18.2	165.1	200.5	610.4	1,572.2
Dec.	425.4	127.2	24.8	18.3	165.4	201.4	614.4	1,576.9

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(1) Total employment by establishment--includes production workers, clerical and white collar employees.
(2) Includes employees of production companies and oil field service companies.

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

Section V
Table 2b

PETROLEUM INDUSTRY EMPLOYMENT(1)
(In Thousands)

Year	Extraction(2)	Refining	Paving and Roofing	Oil Pipelines	Gas Production and Distribution	Wholesale	Retail	Total
1988	417.2	127.8	26.2	16.5	167.0	203.9	631.0	1,589.5
Jan.	418.0	127.4	23.4	17.9	165.2	200.1	612.9	1,564.9
Feb.	413.9	125.7	23.3	15.9	164.5	200.2	615.4	1,558.9
Mar.	414.7	125.3	24.0	15.9	164.7	200.8	618.5	1,563.9
Apr.	416.2	125.3	26.3	15.9	165.1	201.4	622.2	1,572.4
May	418.2	127.4	27.1	16.1	166.2	202.6	630.6	1,588.2
Jun.	421.3	128.7	27.8	16.7	169.7	204.4	636.8	1,605.4
Jul.	423.2	129.5	27.9	17.0	170.8	206.3	641.4	1,616.1
Aug.	423.6	129.7	27.8	16.9	170.5	206.3	643.4	1,618.2
Sep.	418.6	128.8	27.8	16.4	167.2	206.1	638.5	1,603.4
Oct.	415.9	128.5	27.7	16.3	167.0	205.8	637.7	1,598.8
Nov.	412.4	128.6	26.9	16.2	166.8	205.5	636.9	1,593.3
Dec.	410.5	128.3	24.6	16.2	166.2	206.8	637.7	1,590.3

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(1) Total employment by establishment--includes production workers, clerical and white collar employees.
(2) Includes employees of production companies and oil field service companies.

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings".

Section V
Table 3

SOURCES OF CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Millions of dollars)

Year	Internal Funds	External Funds	Total Funds
1947	$ 2,221	$ 682	$ 2,903
1948	3,250	592	3,842
1949	2,971	641	3,612
1950	3,285	159	3,444
1951	3,847	316	4,163
1952	4,092	831	4,923
1953	4,591	520	5,111
1954	4,897	353	5,250
1955	5,429	520	5,949
1956	6,351	1,222	7,573
1957	6,536	1,211	7,747
1958	5,806	970	6,776
1959	6,211	241	6,452
1960	6,401	245	6,646
1961	6,892	649	7,541
1962	7,280	677	7,957
1963	7,710	925	8,635
1964	7,905	990	8,895
1965	8,681	1,196	9,877
1966	10,085	2,032	12,117
1967	10,682	2,791	13,473
1968	11,280	4,015	15,295
1969	11,715	2,998	14,713
1970	14,333	4,156	18,489
1971	15,132	5,059	20,191
1972	16,164	4,632	20,796
1973	23,211	4,786	27,997
1974	32,510	6,232	38,742
1975	23,931	10,129	34,060
1976	28,254	10,310	38,564
1977	33,427	8,678	42,105
1978	38,410	4,930	43,340
1979	62,828	8,568	71,396
1980	70,721	11,900	82,621
1981	64,930	16,585	81,515
1982	67,167	15,430	82,597
1983	66,962	8,707	75,669
1984	48,811	22,347	71,158

Source: The Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies"

Section V
Table 4

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Autos and Trucks	20.7	25.4	30.2	32.5	17.6	18.7	19.4	18.0	29.8	14.6	16.4	9.1	16.9	16.9	13.2
Drugs Soaps, etc.	20.7	21.3	16.2	21.4	17.7	13.7	15.1	14.8	17.6	19.9	21.5	21.9	22.0	20.4	18.4
Office Equip.	26.7	24.3	18.4	19.3	16.9	14.3	13.2	14.7	16.7	17.5	18.0	13.7	14.4	14.2	16.1
Glass Products	17.6	15.5	19.8	24.4	15.2	14.6	14.9	16.2	20.6	17.7	15.6	11.9	16.7	13.4	11.1
Elect. Equip.& Electronics	19.9	20.3	17.3	22.5	16.0	14.8	14.9	13.9	13.1	11.8	13.9	12.4	14.4	11.4	10.0
Auto Parts	23.4	22.9	18.9	22.7	15.7	13.1	13.2	10.4	15.9	12.9	12.1	7.4	13.1	7.3	6.8
Chemical Prod.	17.2	16.9	17.1	21.4	16.3	13.5	13.2	14.4	17.5	15.5	14.0	11.1	14.7	12.4	11.8
Household Equip.	33.2	26.6	15.4	23.0	12.9	12.5	10.7	10.3	12.2	12.7	9.6	7.7	14.1	10.0	9.2
Aircraft and Space	-	2.9	8.2	14.3	9.1	17.9	20.1	27.1	24.3	21.4	20.0	14.1	9.0	6.6	4.4
Soft Drinks	22.6	17.9	16.5	15.6	12.6	12.0	12.6	12.4	14.3	14.3	14.5	14.4	17.1	16.8	15.6
Other Stove and Clay Prod.	17.8	18.2	13.7	18.5	14.9	12.5	11.8	13.2	16.5	16.0	13.2	11.9	14.6	12.1	11.1
Lumber	33.1	23.1	10.7	17.0	16.0	11.4	10.3	9.7	14.0	12.6	9.5	9.2	11.7	7.5	6.6
Paper and Allied Prod.	23.7	19.6	12.8	17.1	16.1	12.0	12.2	12.4	14.0	14.2	10.6	9.3	10.5	9.1	8.1
Paint and Allied Prod.	19.0	13.1	10.3	17.1	12.9	10.7	12.7	13.6	16.3	18.0	15.8	12.8	12.5	13.0	12.5
Banking	20.4	21.0	17.8	15.9	12.3	12.2	12.0	11.4	12.0	12.2	12.5	11.7	11.5	11.6	9.7
Machinery	17.0	18.6	12.4	14.2	14.9	14.1	12.9	11.7	11.6	15.2	13.7	7.9	9.8	9.9	8.9
Rubber and Allied Prod.	16.0	13.4	8.7	15.9	16.4	13.4	14.0	11.9	15.3	13.8	12.4	10.6	12.9	10.3	10.2
Printing and Publ.	19.9	14.3	14.7	14.5	11.8	11.0	10.5	10.9	13.0	13.8	14.0	11.3	12.8	13.9	11.9
Petroleum	15.9	21.6	13.6	15.1	16.7	14.5	14.7	13.8	14.1	14.6	13.7	9.9	10.0	10.3	10.4
Other Food Prod.	21.2	16.9	14.0	15.4	11.8	10.0	11.1	11.5	11.8	11.7	11.5	11.4	11.8	11.4	12.8
Other Metal Prod.	15.7	17.1	11.1	16.4	14.9	11.4	11.5	11.1	12.8	12.5	12.0	8.9	11.4	6.8	7.3
Brewing	26.4	18.4	22.1	15.1	11.6	10.8	10.8	8.2	8.7	7.7	7.4	6.8	7.8	7.7	9.5
Building, Heat, Plumb. Equip.	19.6	20.1	12.6	17.8	13.8	10.9	10.2	9.8	11.3	11.3	9.4	8.1	9.1	5.3	4.6
Dairy Prod.	15.2	13.0	15.5	13.9	11.0	10.4	11.2	12.4	12.1	12.4	11.9	11.9	11.8	11.3	11.0
Non Ferrous Metals	14.8	15.3	8.0	14.5	13.5	11.5	11.0	10.8	16.6	17.2	9.7	6.8	8.9	7.2	6.8
Furniture and Fixtures	17.1	18.3	10.9	18.7	13.1	10.1	9.8	9.5	12.9	14.2	7.8	8.6	10.5	7.9	7.1
Iron and Steel	11.3	13.9	11.6	15.3	12.3	8.8	11.6	9.4	15.2	13.9	13.2	8.2	8.4	7.8	6.4
Total Manufacturing	17.0	18.2	13.8	17.1	14.4	11.3	12.7	12.3	14.9	13.8	12.9	9.8	11.7	10.6	9.9
Total Mining	16.0	20.5	12.0	13.2	13.0	10.1	7.9	8.2	13.0	13.8	9.6	7.3	7.8	8.0	8.3
Total Trade	18.3	18.2	13.2	14.8	11.5	10.1	9.9	9.9	10.9	11.4	10.8	10.5	11.9	10.7	10.2

Source: First National City Bank

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Autos & Trucks	19.4	19.6	19.9	23.4	17.8	12.0	16.6	13.8	5.8	15.0	17.2	17.6	6.1	5.7
Drugs & Medicine	17.8	18.7	19.8	22.1	22.5	20.3	19.8	17.7	18.8	19.0	19.8	21.4	21.0	20.4
Soap, Cosmetics	17.0	16.9	17.6	16.8	17.9	19.4	18.9	18.6	18.7	19.3	20.2	20.2	17.9	18.0
Office Eqpmt., Computers	17.2	18.0	17.9	18.7	18.1	17.8	19.0	17.4	13.9	12.5	13.8	16.7	16.3	15.9
Glass Products	11.6	11.6	12.1	13.5	12.7	11.1	11.9	12.2	9.0	11.1	12.5	12.9	10.6	9.8
Electr.Eqpmt.& Electronics	11.3	10.7	11.3	14.8	16.7	15.4	14.1	13.0	10.1	10.7	13.6	15.3	13.1	12.7
Auto Parts	10.2	11.4	12.0	13.4	14.0	11.4	12.6	13.0	8.9	10.4	13.5	14.4	10.4	9.6
Chemical Products	12.3	13.2	14.7	15.4	14.6	11.4	11.7	11.4	9.5	9.7	11.3	15.2	18.8	15.8
Household Appliances	11.5	12.8	13.9	15.0	15.0	14.7	14.0	13.5	11.9	12.1	15.4	15.6	5.3	6.2
Aerospace	12.9	11.7	12.9	15.4	15.7	13.4	13.9	11.4	6.7	6.3	8.9	11.7	13.8	11.7
Soft Drinks	16.6	17.9	20.7	21.1	22.0	23.3	22.7	22.5	22.7	23.1	22.1	22.0	19.0	20.0
Other Stone & Clay Prod.	9.0	9.1	10.6	9.9	9.2	7.3	8.9	9.3	7.0	8.7	10.8	11.9	9.1	8.2
Lumber & Wood Prod.	7.6	8.1	10.9	11.5	11.0	9.4	14.1	15.2	10.2	11.2	12.6	20.8	15.9	10.0
Paper & Allied Prod.	9.3	9.2	10.3	10.5	11.8	9.5	10.7	10.3	7.4	5.6	8.8	14.6	18.3	12.7
Paint & Allied Prod.	11.6	12.0	14.4	14.1	14.3	11.6	11.5	10.2	6.2	8.1	10.6	10.3	11.7	9.0
Baking	9.9	11.0	11.3	11.9	13.9	15.7	13.4	7.9	11.0	12.8	11.8	9.4	12.0	17.0
Machinery	9.9	9.7	11.9	14.4	16.9	14.7	13.5	12.9	10.5	10.3	10.6	12.7	12.2	11.6
Rubber & Allied Prod.	9.4	9.9	11.5	11.8	12.8	10.8	12.7	11.1	7.6	9.8	11.6	11.5	9.7	7.8
Printing & Publishing	10.5	12.4	14.0	16.9	17.9	15.4	14.9	14.8	12.5	12.6	13.8	15.4	14.5	12.5
Petroleum Prod'n Refng.	10.6	11.5	11.6	11.9	12.6	12.8	13.1	11.9	11.0	11.2	10.8	15.6	19.6	13.9
Building,Heat. Plumb.Equip.	6.3	6.4	8.2	10.6	12.0	11.3	11.3	8.5	7.0	8.4	12.1	11.6	14.2	12.3
Other Food Products	12.5	12.1	12.7	12.6	13.3	12.3	12.7	12.1	12.8	12.3	14.2	14.8	14.4	14.1
Other Metal Products	9.0	9.3	10.4	12.9	14.1	13.8	13.3	12.5	10.4	8.9	10.4	12.9	14.0	13.0
Brewing	8.9	9.1	10.1	11.1	13.4	12.2	13.2	13.2	16.0	15.8	14.8	13.1	12.3	10.3
Dairy Products	10.5	11.2	12.2	12.5	12.6	11.8	11.7	11.8	12.0	12.6	12.8	13.0	13.2	14.3
Non Ferrous Metals	7.1	7.1	9.0	11.8	15.7	11.4	11.1	12.5	10.6	5.0	7.1	11.2	15.1	7.4
Furniture & Fixtures	7.8	8.1	11.1	13.0	14.3	11.9	11.3	12.4	8.4	11.9	12.5	13.0	8.2	7.0
Iron & Steel	5.4	7.3	9.2	9.6	9.4	7.4	8.5	7.4	4.6	4.6	6.1	9.8	17.1	10.0
Total Manufacturing	10.9	11.6	12.7	13.9	14.2	12.6	13.3	12.4	10.8	10.8	12.1	14.9	15.2	12.6
Total Mining	8.6	9.1	10.4	12.2	13.9	16.2	15.0	12.6	8.5	8.5	10.7	16.6	24.5	16.1
Total Trade	10.3	10.4	12.1	13.2	13.7	13.2	14.1	13.5	11.7	11.7	11.8	12.7	13.5	13.0

Source: First National City Bank

Section V
Table 4b

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1976	1977	1978	1979	1980	1981(p)
Autos & Trucks	18.3	20.8	17.4	10.5	-13.6	-6.0
Drugs & Medicine	20.0	19.2	22.0	22.9	22.2	19.4
Soap, Cosmetics	18.3	19.7	20.9	19.9	19.7	18.1
Office Eqpmt., Computers	17.4	18.8	23.3	20.7	21.2	18.1
Glass Products	17.3	11.5	11.1	14.6	12.9	11.3
Elec.Eqpmt.,& Electronics	16.2	16.7	17.5	17.3	18.7	17.5
Auto Parts	15.3	16.4	17.4	18.2	11.9	16.2
Chemical Products	16.1	14.3	14.9	17.3	16.5	16.7
Household Appliances	17.4	19.4	16.8	16.6	14.3	13.6
Aerospace	13.6	17.4	17.0	21.8	17.7	12.7
Soft Drinks	22.4	22.3	22.3	22.3	20.9	23.0
Other Stone & Clay Prod.	10.6	12.2	17.2	14.5	5.5	10.4
Lumber & Wood Products	15.5	16.0	17.7	20.2	11.0	8.3
Paper & Allied Products	14.8	14.1	14.0	17.4	13.6	14.0
Paint & Allied Products	10.9	8.1	8.8	11.0	12.8	13.4
Baking	16.1	17.8	19.7	17.4	17.4	18.1
Machinery	13.6	15.0	16.5	18.3	14.3	14.4
Rubber & Allied Prod.	7.5	10.0	6.2	6.4	4.2	10.9
Printing & Publishing	13.9	16.8	21.2	19.4	18.5	19.0
Petroleum Prod'n. & Refing.	14.8	14.0	14.5	22.6	25.4	20.2
Building, Heating, Plumbing Equipment	21.0	20.4	21.8	26.0	22.4	18.3
Other Food Products	16.1	16.3	17.6	17.3	17.8	19.1
Other Metal Products	15.0	14.8	13.6	16.5	13.7	13.1
Brewing	11.5	10.5	10.1	12.5	16.0	15.9
Dairy Products	14.7	14.9	15.6	14.8	16.2	14.5
Non Ferrous Metals	8.5	8.0	9.4	18.6	18.5	10.5
Furniture & Fixtures	9.8	8.5	11.6	7.2	9.0	12.8
Iron & Steel	8.7	4.4	9.4	11.7	10.0	12.2
Total Manufacturing	15.0	14.9	15.9	18.4	16.5	15.7
Total Mining	16.5	8.5	8.2	19.8	19.1	19.2
Total Trade	14.7	15.0	15.3	15.7	13.8	13.6

(p) Preliminary

Source: First National City Bank

Section V
Table 5

DOMESTIC AND FOREIGN NET INCOME OF A GROUP OF PETROLEUM COMPANIES
(Millions of Dollars)

	NET INCOME		
Year	U.S.	Foreign	Total
1960	$ 1,887	$ 1,581	$ 3,468
1961	1,958	1,719	3,677
1962	2,044	1,963	4,007
1963	2,392	2,149	4,541
1964	2,556	2,156	4,712
1965	2,927	2,164	5,091
1966	3,438	2,214	5,652
1967	3,727	2,421	6,148
1968	3,913	2,751	6,664
1969	3,774	2,928	6,702
1970	3,609	3,029	6,638
1971	3,372	3,753	7,125
1972	3,526	3,155	6,681
1973	4,008	7,396	11,404
1974	6,119	9,931	16,050
1975	5,623	5,530	11,513
1976	7,165	5,462	12,627
1977	7,420	6,565	13,985
1978	7,968	6,582	14,550
1979	12,237	18,383	30,620
1980	15,073	19,047	34,120
1981	15,916	12,537	28,453
1982	12,831	8,431	21,262
1983	9,573	10,465	20,038
1984	9,191	10,874	20,065
1985	8,289	10,410	18,699

SOURCE: Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies"

Section V
Table 6

WORLD PETROLEUM INDUSTRY CAPITAL AND EXPLORATION EXPENDITURES
UNITED STATES versus FOREIGN
(Millions of U.S. dollars)

	CAPITAL EXPENDITURES			GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS			COMBINED		
Year	United States	Foreign	World Total	United States	Foreign	World Total	United States	Foreign	World Total
1947	2,825	1,225	4,050	250	70	320	3,075	1,295	4,370
1948	3,350	1,600	4,950	300	100	400	3,650	1,700	5,350
1949	3,000	1,925	4,925	325	100	425	3,325	2,025	5,350
1950	2,925	1,500	4,425	300	125	425	3,225	1,625	4,850
1951	3,625	1,700	5,325	400	150	550	4,025	1,850	5,875
1952	4,400	2,350	6,750	500	175	675	4,900	2,525	7,425
1953	5,025	2,550	7,575	575	175	750	5,600	2,725	8,325
1954	5,350	2,725	8,075	600	200	800	5,950	2,925	8,875
1955	5,600	2,950	8,500	625	250	875	6,225	3,200	9,425
1956	6,050	3,975	10,025	700	300	1,000	6,750	4,275	11,025
1957	6,400	5,000	11,400	700	375	1,075	7,100	5,375	12,475
1958	5,300	5,400	10,700	650	400	1,050	5,950	5,800	11,750
1959	5,272	5,775	11,050	650	470	1,120	5,925	6,245	12,170
1960	5,175	5,350	10,525	625	460	1,085	5,800	5,810	11,610
1961	5,100	5,325	10,425	600	420	1,020	5,700	5,745	11,445
1962	5,725	5,385	11,110	575	425	1,000	6,300	5,800	12,100
1963	5,475	5,675	11,150	600	450	1,050	6,075	6,125	12,200
1964	6,100	6,175	12,275	650	480	1,130	6,750	6,655	13,405
1965	6,375	6,800	13,175	610	570	1,180	6,985	7,370	14,355
1966	7,125	7,550	14,675	650	460	1,110	7,775	8,010	15,785
1967	7,650	7,925	15,575	615	575	1,190	8,265	8,500	16,765
1968	8,350	9,550	17,900	715	615	1,330	9,065	10,165	19,230
1969	8,175	10,200	18,375	725	655	1,380	8,900	10,855	19,755
1970	8,225	11,900	20,125	665	675	1,340	8,890	12,575	21,465
1971	7,250	14,550	21,800	715	680	1,395	7,965	15,230	23,195
1972	9,050	15,900	24,950	740	800	1,540	9,790	16,700	26,490
1973	10,640	19,355	29,995	850	850	1,700	11,490	20,205	31,695
1974	16,625	27,075	43,700	1,130	1,055	2,185	17,755	28,130	45,885

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry, Annual

Section V
Table 6a

WORLD PETROLEUM INDUSTRY CAPITAL AND EXPLORATION EXPENDITURES
UNITED STATES versus FOREIGN
(Millions of U.S. dollars)

	CAPITAL EXPENDITURES			GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS			COMBINED		
Year	United States	Foreign	World Total	United States	Foreign	World Total	United States	Foreign	World Total
1947	2,825	1,225	4,050	250	70	320	3,075	1,295	4,370
1975	17,725	31,900	49,625	1,195	1,130	2,325	18,920	33,030	51,950
1976	22,085	34,640	56,725	1,375	1,160	2,535	23,460	35,800	59,260
1977	22,400	39,180	61,580	1,645	1,750	3,395	24,045	40,930	64,975
1978	24,475	43,900	68,375	1,975	2,060	4,035	26,450	45,960	72,410
1979	32,200	49,425	81,625	2,600	2,725	5,325	34,800	52,150	86,950
1980	42,900	62,625	105,525	3,850	3,775	7,625	46,750	66,400	113,150
1981	63,000	75,600	138,600	5,700	4,900	10,600	68,700	80,500	149,200
1982	63,550	75,875	139,425	4,500	5,100	9,600	68,050	80,975	149,025
1983	45,600	66,175	111,775	4,250	4,175	8,425	49,850	70,350	120,200
1984	45,850	60,925	106,775	4,075	4,300	8,375	49,925	65,225	115,150

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry, Annual

Section V
Table 7

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	FUNDS AVAILABLE FROM					FUNDS USED FOR				
Year	Cash Earnings	Long Term Debt Issued	Stock Issued	Other	Total	Capital Expenditures	Dividends	Long Term Debt Repaid	Other	Total
1947	2,160	476	206	61	2,903	2,076	455	62	135	2,728
1948	3,099	476	116	151	3,842	2,591	508	101	366	3,566
1949	2,704	603	38	267	3,612	2,263	603	144	224	3,231
1950	3,080	152	7	205	3,444	1,894	724	224	188	3,030
1951	3,706	258	58	141	4,163	2,540	884	144	103	3,671
1952	3,902	701	130	190	4,923	3,100	939	143	255	4,437
1953	4,379	511	9	212	5,111	3,378	1,019	148	261	4,806
1954	4,592	344	9	305	5,250	3,669	1,041	196	181	5,087
1955	5,200	474	46	229	5,949	3,905	1,163	217	295	5,580
1956	5,866	1,166	56	485	7,573	4,988	1,324	249	484	7,045
1957	6,318	714	497	218	7,747	5,453	1,414	431	219	7,517
1958	5,531	908	62	275	6,776	4,356	1,419	543	174	6,492
1959	5,892	215	26	319	6,452	4,266	1,468	327	209	6,270
1960	6,174	240	5	227	6,646	4,241	1,505	250	326	6,322
1961	6,388	587	62	504	7,541	4,560	1,582	578	332	7,052
1962	6,869	504	173	411	7,957	5,198	1,761	516	603	8,078
1963	7,492	628	297	218	8,635	4,926	1,920	462	695	8,003
1964	7,719	570	420	186	8,895	5,849	2,104	499	653	9,105
1965	8,425	1,085	111	256	9,877	6,421	2,289	407	585	9,702
1966	9,292	1,848	184	793	12,117	7,731	2,479	807	744	11,761
1967	10,080	2,328	463	602	13,473	8,734	2,699	644	548	12,625
1968	10,958	3,622	393	322	15,295	9,690	2,950	992	829	14,461
1969	11,238	2,732	266	477	14,713	9,766	3,140	1,841	798	15,545
1970	13,371	3,725	431	962	18,489	11,393	3,711	1,905	851	17,860
1971	14,389	5,059	(3)	743	20,191	12,511	3,836	2,029	972	19,348
1972	14,377	4,632	(3)	1,787	20,796	12,717	3,774	3,258	751	20,500
1973	20,623	4,786	(3)	2,588	27,997	14,247	4,056	4,023	381	22,707
1974	28,165	6,232	(3)	4,345	38,742	22,270	4,681	4,262	894	32,107

(3) Included in Long Term Debt Issued.
(4) Includes preferred and common stock retired.

Source: The Chase Manhattan Bank, Financial Analysis of a Group of Petroleum Companies

Section V
Table 7a

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	FUNDS AVAILABLE FROM					FUNDS USED FOR				
Year	Cash Earnings	Long Term Debt Issued	Stock Issued	Other(1)	Total	Capital Expenditures	Dividends	Long Term Debt Repaid	Other(2)	Total
1975	22,714	10,129	(3)	1,217	34,060	24,205	4,819	5,316	1,740	36,080
1976	25,828	10,310	(3)	2,426	38,564	26,036	5,208	5,230	829	37,303
1977	29,003	8,678	(3)	4,424	42,105	27,156	5,995	5,954	1,508	40,613
1978	33,184	4,930	(3)	5,226	43,340	28,770	6,781	6,885	1,562	43,998
1979	55,844	8,568	(3)	6,984	71,396	42,229	8,127	8,249	2,473	61,078
1980	66,859	11,900	(3)	5,862	82,821	53,776	10,305	9,728	2,613	76,422
1981	63,207	16,585	(3)	1,723	81,515	63,976	11,068	10,020	4,867	89,931
1982	60,884	14,980	450	6,283	82,597	64,538	11,265	9,281	3,731	90,019
1983	60,256	8,407	300	6,706	75,669	49,521	11,057	7,524	4,507	72,609
1984	57,200	24,900	1,200	4,100	87,400	44,300	10,600	7,000	35,000	96,900
1985	70,200	22,700	500	19,500	113,000	49,800	12,500	27,100	26,800	116,100
1986	54,100	14,800	1,200	22,700	92,700	35,000	13,000	19,000	14,200	81,200

(1) Other includes sales of assets and other transactions and, in 1984-85 includes mergers and acquisitions.
(2) Other includes investments and advancements and preferred and common stock retired.
(3) Included in Long Term Debt Issued.

Source: The Chase Manhattan Bank, Financial Analysis of a Group of Petroleum Companies

Section V
Table 8

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

Year	PRODUCTION U.S.	PRODUCTION FOREIGN	TRANSPORTATION U.S.	TRANSPORTATION FOREIGN	REFINERIES & CHEMICAL PLANTS U.S.	REFINERIES & CHEMICAL PLANTS FOREIGN
1947	1,750	475	295	310	400	225
1948	2,100	685	310	255	600	405
1949	2,000	770	250	405	420	475
1950	2,100	475	215	430	275	375
1951	2,650	575	285	410	325	400
1952	3,200	890	385	505	470	490
1953	3,525	890	425	610	675	620
1954	3,800	970	325	740	800	585
1955	4,100	1,110	225	655	835	580
1956	4,475	1,725	225	775	825	725
1957	4,525	2,180	345	1,060	950	980
1958	3,650	1,925	350	1,520	725	1,045
1959	3,850	2,030	260	1,720	525	1,020
1960	3,735	1,875	265	1,395	560	1,030
1961	3,525	1,855	230	1,140	685	1,265
1962	4,000	1,665	340	1,205	660	1,415
1963	3,650	1,520	415	1,155	600	1,765
1964	3,960	1,605	340	1,570	675	1,515
1965	3,760	2,025	265	1,510	1,125	1,665
1966	3,770	1,870	300	1,755	1,575	2,435
1967	4,025	1,975	400	1,740	1,600	2,550
1968	4,925	2,535	475	2,280	1,450	2,980
1969	4,750	2,790	400	2,600	1,525	2,995

Year	MARKETING U.S.	MARKETING FOREIGN	OTHER CAPITAL EXPENDITURES U.S.	OTHER CAPITAL EXPENDITURES FOREIGN	TOTAL CAPITAL EXPENDITURES U.S.	TOTAL CAPITAL EXPENDITURES FOREIGN
1947	300	175	80	40	2,825	1,225
1948	225	165	115	90	3,350	1,600
1949	240	215	90	60	3,000	1,925
1950	275	180	60	40	2,925	1,500
1951	300	245	65	70	3,625	1,700
1952	280	375	65	90	4,400	2,350
1953	325	360	75	70	5,025	2,550
1954	350	385	75	45	5,350	2,725
1955	375	535	65	70	5,600	2,950
1956	450	685	75	65	6,050	3,975
1957	475	710	105	70	6,400	5,000
1958	400	745	175	165	5,300	5,400
1959	450	885	190	120	5,275	5,775
1960	475	950	140	100	5,175	5,350
1961	525	930	135	135	5,100	5,325
1962	600	985	125	105	5,725	5,375
1963	650	1,085	160	150	5,475	5,675
1964	850	1,340	275	145	6,100	6,175
1965	1,000	1,430	225	170	6,375	6,800
1966	1,100	1,310	380	180	7,125	7,550
1967	1,250	1,455	375	205	7,650	7,925
1968	1,150	1,515	350	240	8,350	9,550
1969	1,250	1,555	250	260	8,175	10,200

Source: The Chase Manhattan Bank

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

Year	PRODUCTION		TRANSPORTATION		REFINERIES & CHEMICAL PLANTS	
	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1970	4,335	2,895	550	2,915	1,625	3,900
1971	3,385	3,830	675	3,435	1,550	4,740
1972	5,915	4,190	425	4,580	1,350	4,955
1973	7,440	5,485	550	7,230	1,475	4,565
1974	11,450	8,085	1,660	9,760	2,600	7,115
1975	9,380	9,875	3,725	11,510	3,600	8,270
1976	13,460	12,315	3,900	12,350	3,775	7,635
1977	15,180	17,280	2,300	8,060	3,700	10,965
1978	17,650	20,055	1,350	7,380	4,050	13,275
1979	24,600	24,465	1,450	6,575	4,625	14,385
1980	33,100	33,775	2,150	7,725	5,650	16,125
1981	51,700	41,675	1,725	10,300	7,250	18,325
1982	52,275	43,400	1,300	7,650	7,550	19,525
1983	37,275	36,575	1,000	7,725	5,100	17,075
1984	38,050	34,650	975	5,925	4,200	15,700

Year	MARKETING		OTHER CAPITAL EXPENDITURES		TOTAL CAPITAL EXPENDITURES	
	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1970	1,450	1,770	265	420	8,225	11,900
1971	1,350	2,030	290	515	7,250	14,550
1972	1,100	1,725	260	450	9,050	15,900
1973	850	1,630	325	445	10,640	19,355
1974	650	1,565	325	550	16,625	27,075
1975	650	1,510	370	735	17,725	31,900
1976	625	1,555	325	785	22,085	34,640
1977	775	1,895	445	980	22,400	39,180
1978	950	2,290	475	980	24,475	43,900
1979	975	2,775	550	1,225	32,200	49,425
1980	1,300	3,750	700	1,250	42,900	62,625
1981	1,425	3,775	900	1,525	63,000	75,600
1982	1,400	3,700	1,025	1,600	63,550	75,875
1983	1,375	3,300	850	1,500	45,600	66,175
1984	1,900	3,275	725	1,375	45,850	60,925

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry

ESTIMATED U.S. EXPLORATION & DEVELOPMENT EXPENDITURES
CHASE MANHATTAN BANK GROUP AND ALL OTHER COMPANIES
(Millions of Dollars)

Year	Total Exploration and Development Expenditures	Expenditures by Chase Manhattan Group	Expenditures by All Other Companies
1947	$ 1,950	$ 991	$ 959
1948	2,300	1,318	982
1949	2,215	1,217	998
1950	2,325	1,157	1,168
1951	2,975	1,620	1,355
1952	3,625	1,855	1,770
1953	3,975	2,014	1,961
1954	4,300	2,180	2,120
1955	4,675	2,383	2,292
1956	5,075	2,621	2,454
1957	5,100	2,673	2,427
1958	4,225	2,241	1,984
1959	4,350	2,455	1,895
1960	4,200	2,412	1,788
1961	4,000	2,417	1,583
1962	4,425	2,848	1,577
1963	4,125	2,452	1,673
1964	4,450	2,817	1,633
1965	4,210	2,847	1,363
1966	4,250	2,990	1,260
1967	4,365	3,212	1,153
1968	5,390	4,087	1,303
1969	5,250	3,768	1,482
1970	4,775	3,119	1,656
1971	3,900	2,740	1,160
1972	6,480	4,225	2,255
1973	8,140	5,275	2,865
1974	12,355	8,550	3,805
1975	10,250	7,007	3,243
1976	14,510	8,711	5,799
1977	16,500	10,159	6,341
1978	19,300	11,378	7,922
1979	26,750	20,616	6,134

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry and Financial Analysis of a Group of Petroleum Companies

ESTIMATED U.S. EXPLORATION & DEVELOPMENT EXPENDITURES CHASE MANHATTAN BANK GROUP AND ALL OTHER COMPANIES
(Millions of Dollars)

Year	Total Exploration and Development Expenditures	Expenditures by Chase Manhattan Group	Expenditures by All Other Companies
1980	36,200	25,053	11,147
1981	56,475	32,765	23,710
1982	55,400	30,902	24,498
1983	40,875	25,537	15,338
1984	41,450	23,010	17,440

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry and Financial Analysis of a Group of Petroleum Companies

Section V
Table 10

U.S. ESTIMATED EXPENDITURES FOR EXPLORATION, DEVELOPMENT AND PRODUCTION, MILLION DOLLARS(1)

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Exploration Expenditures									
Drilling and equipping wells	944.2	1,580.5	2,124.2	2,467.1	3,220.8	4,098.3	5,619.2	8,678.6	13,545.7
Acquiring undeveloped acreage	3,552.0	5,774.0	1,614.5	3,024.3	2.579.5	2,885.4	7,036.5	7,899.2	11,188.2
Land dept. leasing and scouting	76.5	90.6	113.4	126.3	164.1	163.6	223.5	294.7	376.2
Geological and geophysical	399.5	567.6	652.8	692.3	833.3	1,028.7	1,218.2	1,871.1	2,823.0
Lease rental	150.7	177.8	204.7	206.7	245.8	285.3	311.6	429.1	600.4
Test Hole contributions	13.8	8.9	16.9	21.7	32.7	24.5	23.0	28.0	34.2
Other, incl. direct overhead	106.0	168.6	242.0	240.6	305.2	393.5	523.5	757.0	999.0
General and administrative	203.6	290.9	341.7	404.8	413.5	488.8	661.7	892.8	1,107.5
TOTAL EXPLORATION(3)	5,446.2	8,658.8	5,310.3	7,183.9	7,794.9	9,367.9	15,617.2	20,830.8	30,674.2
Development Expenditures									
Drilling and equipping wells	1,766.8	2,265.2	3,354.6	4,154.4	5,712.9	6,838.7	7,972.5	10,193.4	16,107.5
Lease equipment	572.2	824.1	1,499.6	1,486.8	1,607.9	2,175.0	2,146.0	3,572.8	4,760.3
Acquiring producing acreage	183.1	474.0	303.4	381.4	382.8	450.1	5,511.3	3,414.6	972.6
Improved recovery programs	352.5	625.4	928.9	378.4	461.4	639.3	528.3	941.2	1,458.2
Other, incl. direct overhead	(2)	(2)	(2)	978.9	672.3	467.5	544.3	712.5	801.6
General and administrative	164.6	224.4	336.1	354.8	375.7	440.1	601.2	744.4	915.6
TOTAL DEVELOPMENT(3)	3,039.3	4,413.1	6,422.6	7,734.8	9,212.9	11,010.7	17,303.6	19,578.9	25,015.7
Producing Expenditures									
Direct operating expenditures	2,593.6	3,246.4	3,952.9	4,507.4	5,277.9	6,152.2	7,295.3	9,461.9	13,505.1
Taxes, excl. income tax	924.6	1,534.1	1,746.1	1,897.9	2,098.9	2,379.0	2,750.4	4,564.9	20,557.5
General and administrative	496.8	601.4	768.8	865.5	905.2	1,069.8	1,181.3	1,709.8	2,244.8
Other indirect expenses	193.5	252.1	358.0	369.1	435.6	393.6	538.6	6,508.7	6,638.6
TOTAL PRODUCTION(3)	4,208.5	5,634.2	6,825.8	7,639.9	8,717.4	9,994.6	11,765.6	22,245.2	42,945.8
TOTAL EXPENDITURES(3)	12,694.2	18,706.1	18,558.7	22,558.7	25,725.1	30,373.2	44,686.4	62,655.0	98,635.7

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(1) Data not available prior to 1973
(2) Included in improved recovery programs before 1976
(3) TOTALS DO NOT ADD DUE TO ROUNDING.

Source: U.S. Department of Commerce, Bureau of Census: Annual Survey of Oil and Gas

Section V
Table 10a

U.S. ESTIMATED EXPENDITURES FOR EXPLORATION, DEVELOPMENT AND PRODUCTION, MILLION DOLLARS(1)

	1982	1983	1984	1985	1986	1987
Exploration Expenditures						
Drilling and equipping wells	12,935.8	7,045	7,363	6,297	3,048	2,373
Acquiring undeveloped acreage	8,163.3	8,052	7,807	4,040	1,335	1,685
Land dept. leasing and scouting	458.0	317	379	381	301	228
Geological and geophysical	2,997.5	2,540	2,619	2,392	1,244	1,194
Lease rental	643.7	586	536	541	383	289
Test Hole contributions	47.2	49	75	16	125	4
Other, incl. direct overhead	1,192.0	N.A.	N.A.	N.A.	N.A.	N.A.
General and administrative	1,420.8	2,491(3)	2,719(3)	2,732(3)	2,032(3)	1,826(3)
TOTAL EXPLORATION(2)	27,858.3	21,080	21,498	16,399	8,468	7,599
Development Expenditures						
Drilling and equipping wells	15,578.0	18,340	18,693	17,411	9,257	7,362
Lease equipment	5,134.6	3,698	4,495	5,029	3,526	2,305
Acquiring producing acreage	1,511.5	N.A.	N.A.	N.A.	N.A.	N.A.
Improved recovery programs	1,943.8	1,062	1,239	1,822	1,140	753
Other, incl. direct overhead	740.2	N.A.	N.A.	N.A.	N.A.	N.A.
General and administrative	950.7	2,068(3)	2,129(3)	2,974(3)	2,431(3)	1,744(3)
TOTAL DEVELOPMENT (2)	25,858.8	25,168	26,556	27,236	16,354	12,164
Producing Expenditures						
Direct operating expenditures	14,405.3	14,457	14,829	18,233	14,720	13,592
Taxes, excl. income tax	14,008.3	16,860	14,895	11,426	4,317	3,941
General and administrative	3,047.8	N.A.	N.A.	N.A.	N.A.	N.A.
Other indirect expenses	6,605.8	4,358(4)	4,187(4)	4,490(4)	4,192	4,550
TOTAL PRODUCTION(2)	38,067.2	35,675	33,911	34,149	23,218	22,083
TOTAL EXPENDITURES(2)	91,784.3	81,923	81,965	77,784	48,040	41,846

(1) Data not available prior to 1973
(2) Totals may not add due to rounding.
(3) Includes Other, including direct overhead.
(4) Includes general and administrative.

Source: 1982--U.S. Department of Commerce, Bureau of Census: Annual Survey of Oil and Gas.
1983-1987--American Petroleum Institute: Survey of Oil and Gas Expenditures, Annual.

Section V
Table 11

ENVIRONMENTAL PROTECTION EXPENDITURES OF THE PETROLEUM INDUSTRY WITHIN THE U.S.(1)
(Millions of Dollars)

YEAR	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
TOTAL EXPENDITURES														
1. Air...............	$125	$167	$187	$231	$320	$571	$550	$737	$932	$1,039	$1,216	$1,188	$1,349	$1,616
2. Water............	146	191	205	224	303	415	379	402	530	629	822	950	884	1,001
3. Land and other...	-	-	-	-	60	101	91	100	150	456	336	383	194	203
TOTAL............	$271	$358	$392	$455	$683	$1,087	$1,020	$1,239	$1,612	$2,124	$2,374	$2,521	$2,427	$2,820
CAPITAL EXPENDITURES														
1. Air...............	$69	$100	$112	$145	$181	$391	$305	$436	$527	$601	$536	$339	$429	$561
2. Water............	79	114	128	136	163	224	184	194	271	356	411	434	340	394
3. Land and other...	-	-	-	-	34	57	51	52	97	396	269	184	89	92
TOTAL............	$148	$214	$240	$281	$378	$672	$540	$682	$895	$1,353	$1,216	$957	$858	$1,047
ADMINISTRATIVE, OPERATING, AND MAINTENANCE EXPENDITURES														
1. Air...............	$43	$50	$53	$62	$108	$143	$198	$251	$352	$389	$635	$792	$864	$997
2. Water............	57	66	75	84	136	185	187	201	249	262	401	502	532	594
3. Land and other...	-	-	-	-	24	41	37	43	50	55	63	197	101	106
TOTAL............	$100	$116	$128	$146	$268	$369	$422	$495	$651	$706	$1,099	$1,491	$1,497	$1,697
RESEARCH AND DEVELOPMENT EXPENDITURES														
1. Air...............	$13	$17	$22	$24	$31	$37	$47	$50	$53	$49	$45	$57	$56	$58
2. Water............	10	11	2	4	4	6	8	7	10	11	10	14	12	13
3. Land and other...	-	-	-	-	2	3	3	5	3	5	4	2	4	5
TOTAL............	$23	$28	$24	$28	$37	$46	$58	$62	$66	$65	$59	$73	$72	$76

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(1) Totals reported are sums of the expenditures reported to API, not total expenditures of the industry.

Source: American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry 1971-1980

ENVIRONMENTAL PROTECTION EXPENDITURES OF THE PETROLEUM INDUSTRY WITHIN THE U.S.(1)

(Millions of Dollars)

YEAR	1980	1981	1982	1983	1984
TOTAL EXPENDITURES					
1. Air..............	$2,184	$2,311	$2,553	$2,014	$1,870
2. Water............	1,299	1,786	1,705	1,552	1,572
3. Land and other...	357	516	551	439	504
TOTAL...........	$3,840	$4,613	$4,809	$4,005	$3,946
CAPITAL EXPENDITURES					
1. Air..............	$728	$711	$932	$497	$420
2. Water............	527	804	745	627	595
3. Land and other...	183	273	282	178	211
TOTAL..........	$1,438	$1,788	$1,959	$1,302	$1,226
ADMINISTRATIVE, OPERATING AND MAINTENANCE EXPENDITURES					
1. Air..............	$1,392	$1,538	$1,554	$1,457	$1,395
2. Water............	754	960	933	901	953
3. Land and other...	165	231	248	243	278
TOTAL..........	$2,311	$2,729	$2,735	$2,601	$2,626
RESEARCH AND DEVELOPMENT EXPENDITURES					
1. Air..............	$64	$62	$67	$60	$55
2. Water............	18	22	27	18	15
3. Land and other...	9	12	21	102	94
TOTAL...........	$91	$96	$115	$102	$115

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(1) Totals reported are sums of the expenditures reported to API, not total expenditures of the industry.

Source: American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry

Section V
Table 12

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976
TOTAL REVENUE	$ 58,091.3	$ 64,115.8	$ 69,511.4	$ 77,164.3	$ 83,835.9	$ 104,494.0	$ 184,306.2	$ 191,788.1	$ 217,055.1
DEDUCTIONS:									
Payroll and Benefits	6,196.8	6,775.4	7,276.0	8,246.9	8,863.0	9,430.2	10,839.6	12,689.6	13,610.2
Depreciation, Depletion and Amortization	3,948.1	4,234.1	4,637.5	4,971.7	5,240.6	5,796.5	6,744.0	7,619.5	7,621.9
Interest	722.7	948.2	1,105.1	1,224.7	1,301.1	1,414.9	1,619.9	1,657.9	1,968.9
Other Costs and Expenses	33,289.1	37,444.2	40,776.1	44,440.3	48,781.0	60,572.5	123,059.6	130,265.3	154,729.8
Total Taxes	8,368.1	9,144.5	10,367.0	12,415.8	13,858.6	18,240.8	29,357.8	30,111.1	28,151.7
TOTAL DEDUCTIONS	$52,524.8	$58,546.4	$64,161.7	$71,299.4	$ 78,044.3	$ 95,454.9	$171,620.9	$182,343.4	$206,082.5
NET INCOME	$5,571.9	$5,389.2	$5,551.6	$5,669.2	$ 5,533.6	$ 9,081.5	$ 12,650.9	$ 9,442.2	$ 10,990.3

Due to mergers, the number of companies used in the sample has decreased from 23 to 19. Based on this new sample, all numbers for previous years have been revised. The companies included in current sample are:

- Amerada Hess Corporation
- American Petrofina, Inc.
- Amoco Corporation
- Ashland Oil, Inc.
- Atlantic Richfield Co.
- Chevron Corporation
- Diamond Shamrock Corp.
- Exxon Corporation
- Kerr-McGee Corporation
- Mobil Corporation
- Murphy Oil Corporation
- Occidental Petroleum Corp.
- Pennzoil Company
- Phillips Petroleum Corp.
- Shell Oil Company
- Standard Oil Coompany (Ohio)
- Sun Company, Inc.
- Texaco Inc.
- Unocal Corporation

Source: Financial Trends of Leading U.S. Oil Companies, 1968-1983, API, Discussion Paper #017R, October 1987

Section V
Table 12a

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1977	1978	1979	1980	1981	1982	1983	1984	1985
TOTAL REVENUE	$243,603.8	$266,411.2	$352,301.5	$466,142.4	$518,894.8	$472,774.3	$430,184.9	$415,621.8	$405,033.1
DEDUCTIONS:									
Payroll and Benefits	15,086.2	17,137.3	20,581.6	25,282.4	28,329.5	30,003.1	29,737.2	29,241.4	28,733.5
Depreciation, Depletion and Amortization	8,750.9	10,507.3	12,259.2	14,324.7	17,339.9	19,807.4	21,520.2	23,351.7	24,804.2
Interest	2,891.2	3,516.7	3,796.2	4,012.7	5,431.7	5,466.5	5,380.0	7,213.9	8,916.5
Other Costs and Expenses	173,163.0	187,353.0	251,037.4	333,199.4	372,629.4	452,627.4	298,969.5	286,568.8	280,561.4
Total Taxes	32,186.8	35,226.2	42,876.5	61,463.2	69,011.5	57,125.9	54,028.0	51,406.3	48,270.0
TOTAL DEDUCTIONS	$232,078.1	$253,740.5	$330,551.4	$438,482.4	$492,742.0	$452,627.4	$409,634.9	$397,782.1	$391,285.6
NET INCOME	$ 11,507.2	$ 12,680.4	$ 21,759.1	$ 27,664.6	$ 26,152.8	$ 20,182.4	$ 20,662.6	$ 17,839.7	$ 13,988.5

Due to mergers, the number of companies used in the sample has decreased from 23 to 19. Based on this new sample, all numbers for previous years have been revised. The companies included in current sample are:

- Amerada Hess Corporation
- American Petrofina, Inc.
- Amoco Corporation
- Ashland Oil, Inc.
- Atlantic Richfield Co.
- Chevron Corporation
- Diamond Shamrock Corp.
- Exxon Corporation
- Kerr-McGee Corporation
- Mobil Corporation
- Murphy Oil Corporation
- Occidental Petroleum Corp.
- Pennzoil Company
- Phillips Petroleum Corp.
- Shell Oil Company
- Standard Oil Company (Ohio)
- Sun Company, Inc.
- Texacp Inc.
- Unocal Corporation

SOURCE: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017R, October 1988.

Section V
Table 12b

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1986	1987
TOTAL REVENUE	$304,588.6	$334,801.3
DEDUCTIONS:		
Payroll and Benefits	26,654.0	23,383.2
Depreciation, Depletion and Amortization	25,655.6	25,098.8
Interest	8,771.4	8,520.8
Other Costs and Expenses	198,966.4	228,398.8
Total Taxes	33,883.5	38,795.7
TOTAL DEDUCTIONS	293,930.9	324,197.3
NET INCOME	$10,613.6	$10,666.3

The companies included in this sample include:

- Amerada Hess Corporation
- American Petrofina, Inc.
- Amoco Corporation
- Ashland Oil, Inc.
- Atlantic Richfield Co.
- Chevron Corporation
- Diamond Shamrock Corp.
- Exxon Corporation
- Kerr-McGee Corporation
- Mobil Corporation
- Murphy Oil Corporation
- Occidental Petroleum Corp.
- Pennzoil Company
- Phillips Petroleum Corp.
- Shell Oil Company
- Standard Oil Co. (Ohio)
- Sun Company, Inc.
- Texaco Inc.
- Unocal Corporation

Source: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017, October 1988.

Section V
Table 13

CAPITAL EXPENDITURES OF LEADING U.S. OIL COMPANIES
(Billions of Dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
TOTAL												
U.S.	6.2	6.2	6.2	5.7	6.2	7.3	12.8	13.6	15.4	16.0	16.0	20.5
World	9.6	9.7	9.6	9.7	10.1	12.0	18.9	20.1	21.3	22.5	24.0	30.6
EXPLORATION & PRODUCTION												
U.S.	3.2	3.0	2.7	2.4	3.2	4.2	7.7	6.5	8.0	8.4	9.1	13.1
World	4.8	4.5	3.9	3.7	4.7	6.0	10.7	10.2	11.5	12.7	14.7	19.8
REFINING, MARKETING, TRANSPORTATION												
U.S.	1.9	2.2	2.6	2.6	2.2	2.0	3.2	4.7	4.2	3.0	2.9	3.5
World	3.4	4.0	4.6	5.0	4.3	4.8	6.0	7.1	6.1	4.9	4.7	5.9
TOTAL PETROLEUM												
U.S.	5.1	5.2	5.3	5.0	5.4	6.2	10.9	11.2	12.2	11.4	12.0	16.6
World	8.2	8.5	8.5	8.7	9.0	10.8	16.7	17.3	17.6	17.6	19.4	25.7
CHEMICALS												
U.S.	0.6	0.5	0.5	0.3	0.4	0.4	0.9	1.4	2.1	2.6	2.2	2.0
World	0.8	0.6	0.6	0.5	0.5	0.5	1.1	1.6	2.4	2.7	2.3	2.0
PETROLEUM & CHEMICALS												
U.S.	5.7	5.7	5.8	5.3	5.8	6.6	11.8	12.6	14.3	14.0	14.2	18.6
World	9.0	9.1	9.1	9.2	9.5	11.3	17.8	18.9	20.0	20.3	21.8	28.0
OTHER ENERGY												
U.S.	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.6	0.9	0.9	0.9
World	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.7	1.0	1.0	1.3
TOTAL ENERGY												
U.S.	5.9	5.9	6.0	5.5	6.0	6.8	12.3	13.2	14.9	14.9	15.1	19.5
World	9.2	9.3	9.3	9.4	9.7	11.5	18.4	19.6	20.7	21.3	22.8	29.3
OTHER												
U.S.	0.3	0.3	0.2	0.2	0.2	0.5	0.5	0.4	0.5	1.1	0.9	1.0
World	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.5	0.6	1.2	1.2	1.3

Source: Financial Trends of Leading U.S. Oil Companies 1968-1983, API, Discussion Paper #017, October 1984

Section V
Table 13a

CAPITAL EXPENDITURES OF LEADING U.S. OIL COMPANIES
(Billions of Dollars)

	1980	1981	1982	1983	1984	1985	1986	1987
TOTAL								
U.S.	27.6	39.4	35.4	28.4	30.3	28.1	17.6	17.0
World	40.7	53.5	49.8	40.2	41.0	39.4	25.4	25.8
EXPLORATION & PRODUCTION								
U.S.	17.5	26.3	22.5	18.9	21.7	19.8	10.5	9.6
World	26.1	35.0	32.1	26.7	28.8	27.3	15.5	15.7
REFINING, MARKETING, TRANSPORTATION								
U.S.	4.3	6.4	6.1	5.1	4.9	4.6	3.9	4.1
World	7.5	9.6	8.8	7.0	6.7	6.6	5.4	5.8
TOTAL PETROLEUM								
U.S.	21.8	32.7	28.6	24.0	26.6	24.4	14.4	13.7
World	33.6	44.6	40.9	33.7	35.5	33.9	20.9	21.5
CHEMICALS								
U.S.	2.5	2.6	2.0	1.1	1.0	1.3	1.2	1.2
World	2.5	2.6	2.0	1.7	1.4	1.5	1.5	1.6
PETROLEUM & CHEMICALS								
U.S.	24.3	35.3	30.6	25.1	27.6	25.7	15.6	14.9
World	36.5	48.1	43.9	35.4	36.9	35.4	22.4	23.1
OTHER ENERGY								
U.S.	1.4	1.6	2.3	1.0	1.0	0.6	0.5	0.5
World	1.9	2.4	3.0	2.1	1.6	1.6	1.2	0.9
TOTAL ENERGY								
U.S.	25.7	36.9	32.9	26.1	28.6	26.3	16.1	15.4
World	38.4	50.5	46.9	37.6	38.5	37.0	23.6	24.0
OTHER								
U.S.	1.9	2.5	2.5	2.3	1.7	1.8	1.5	1.6
World	2.3	3.0	2.9	2.7	2.5	2.4	1.8	1.8

Source: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017R, October 1988.

Section V
Table 14

NET INCOME AS A PERCENT OF STOCKHOLDERS' EQUITY
OIL AND NON-OIL COMPANIES

Year	API-Sample Companies(1)	Non-Petroleum Manufacturing(2)
1968	12.5	14.7
1969	11.3	13.8
1970	10.9	10.0
1971	10.5	11.0
1972	9.8	12.8
1973	15.0	14.5
1974	18.6	13.2
1975	12.7	11.6
1976	13.8	14.0
1977	13.3	14.1
1978	13.5	14.8
1979	20.7	15.1
1980	22.5	12.2
1981	18.5	12.9
1982	13.1	9.7
1983	12.8	11.7
1984	11.4	14.1
1985	9.9	10.8
1986	7.3	11.4
Median	12.8	12.9

(1) Net income as a percent of average stockholders' equity
(2) Net income as a percent of average stockholders' equity. Calculations based on Standard & Poor's Compustat data base, All Industrial Aggregate excluding non-manufacturing (e.g., retail) and petroleum industry sectors. The median number of non-oil comopanies over the period was 747; the range was 694-820.

* Due to mergers, the number of coompanies used in the sample has decreased from 23 to 19. Based on this new sample, many numbers for previous years have been revised. The companies included in current sample are:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corp.
Ashland Oil, Inc.
Atlantic Richfield Co.
Chevron Corp.
Diamond Shamrock Corp.
Exxon Corporation
Kerr-McGee Corp.
Mobil Corp.
Murphy Oil Corp.
Occidental Petroleum
Pennzoil Co.
Phillips Petroleum Corp.
Shell Oil Co.
Standard Oil (Ohio)
Sun Co., Inc.
Texaco Inc.
Unocal Corp.

Source: Financial Trends of Leading U.S. Oil Companies 1968-1986, API, Discussion Paper #017R, October 1987

Section V
Table 15

WINDFALL PROFITS TAX
(Millions of Dollars)

Quarter Ending	Tax Before Adjustments	Total Adjustments(1)	Tax After Adjustments
Mar. 1980(2)	$ 788	$ --	$ 788
June 1980	2,842	- 21	2,821
Sept. 1980	3,413	- 88	3,325
Dec. 1980	3,918	-927	2,991
Mar. 1981	6,953	+242	7,195
June 1981	7,253	-107	7,146
Sept. 1981	6,344	-251	6,093
Dec. 1981	6,007	-497	5,510
Mar. 1982	5,222	-221	5,001
June 1982	4,283	-295	3,988
Sept. 1982	4,404	-445	3,959
Dec. 1982	4,440	-634	3,806
Mar. 1983	3,320	-193	3,127
June 1983	2,951	-203	2,748
Sept. 1983	2,822	-300	2,522
Dec. 1983	2,736	-465	2,271
Mar. 1984	2,622	-228	2,394
June 1984	2,468	-218	2,250
Sept. 1984	2,447	-200	2,247
Dec. 1984	2,236	-256	1,980
Mar. 1985	1,850	-117	1,733
June 1985	1,653	-132	1,521
Sept. 1985	1,442	-146	1,296
Dec. 1985	1,254	-256	1,980
TOTAL	$83,668	-$5,911	$77,757

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(1) Adjustments were made because of errors by withholding agents during previous quarters or, more frequently, because of application of the net income limitation.
(2) One month only.

Source: U.S. Treasury Department, Internal Revenue Service, SOI Bulletin.

Section V
Table 16

U.S. MERCHANDISE TRADE VALUE
(Millions of Dollars)

Year	Exports (1)			Imports (2)			Trade Balance	
	Oil	Total	Oil as % of Total	Oil	Total	Oil as % of Total	Oil	Total
1974	792	98,092	0.8	26,073	102,559	25.4	-25,281	- 4,467
1975	907	107,652	0.8	26,664	98,503	27.1	-25,757	9,149
1976	998	115,223	0.9	34,614	123,477	28.0	-33,616	- 8,254
1977	1,276	121,232	1.1	44,071	150,390	29.3	-42,795	- 29,158
1978	1,561	143,681	1.1	42,188	174,757	24.1	-40,627	- 31,076
1979	1,914	181,860	1.1	59,805	209,458	28.6	-57,891	- 27,599
1980	2,833	220,626	1.3	78,637	244,871	32.1	-75,804	- 24,244
1981	3,696	233,677	1.6	76,659	260,982	29.4	-72,963	- 27,305
1982	5,947	212,193	2.8	60,458	243,952	24.8	-54,511	- 31,759
1983	4,557	200,486	2.3	53,217	258,048	20.6	-48,660	- 57,562
1984	4,470	217,865	2.1	56,924	325,726	17.5	-52,454	- 107,861
1985	4,707	213,133	2.2	50,475	345,276	14.6	-45,768	-132,143
1986	3,640	226,808	1.6	35,142	366,063	9.6	-31,502	-139,255
1987	2,837	252,866	1.1	42,285	405,901	10.4	-39,448	-153,035
1988	3,679	321,813	1.1	38,854	441,574	8.8	-35,175	-119,761

(1) Exports are on an f.a.s. (free alongside ship) basis.
(2) Imports are on an f.a.s. basis through 1980. Beginning in 1981, they are on a customs value basis.

Source: U.S. Department of Commerce, Bureau of Census, FT 135 and FT 410, December issues.

Section V
Table 17

OIL FINDING AND DEVELOPMENT COSTS
(Dollars per Barrel)

Year	U.S.	Foreign	Worldwide
1978	$ 6.64	$ 4.15	$ 5.42
1979	11.74	6.66	9.78
1980	10.66	5.66	8.42
1981	12.17	6.82	10.01
1982	11.57	7.83	10.22
1983	9.24	5.02	7.33
1984	6.61	4.09	5.67
1985	8.76	5.69	7.62
1986	6.96	5.71	6.50

Source: PETROLEUM OUTLOOK by John S. Herold, Inc., 5 Edgewood Avenue, Greenwich, Ct. 06830.

Section V
Table 18

DOMESTIC OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS AND EXPLORATION AND DEVELOPMENT ACTIVITIES FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 396	$ 541	$ 410	$ 344	$ 398	$ 337	$ 135	$ 169
Amoco Corp.	2,247	2,869	2,327	2,472	2,827	3,407	1,030	1,815
Anadarko Petroleum	175	246	242	175	162	144	116	103
Atlantic Richfield	2,044	2,328	2,856	2,286	2,654	2,771	1,062	676
British Petroleum	NA	NA	2,637	2,263	2,184	2,057	1,366	894
Burlington Northern	106	207	417	79	215	303	96	95
Chevron Corp.	2,857	4,431	3,367	2,467	2,688	1,806	962	911
Consolidated Nat. Gas	123	163	178	218	272	332	166	222
DuPont (Conoco)	636	444	812	673	805	849	446	437
Enron	185	256	345	240	362	187	88	87
Enserch	90	151	141	148	236	254	142	148
Exxon	2,294	4,147	4,043	3,463	4,116	4,396	1,947	1,691
Kerr-McGee	198	270	325	214	186	257	86	75
Louisiana Land	447	681	479	275	276	236	105	87
Maxus Energy Corp.	350	524	601	156	188	255	107	113
Mesa	509	628	497	277	661	113	24	54
Mobil	2,572	2,431	3,265	2,267	1,343	1,413	1,054	789
Murphy	115	230	222	207	158	114	61	70
Occidental	810	982	219	379	505	416	274	198
Pennzoil	403	401	393	240	287	482	139	142
Phillips	821	1,619	1,062	1,768	942	607	309	299
Royal Dutch/Shell	2,074	2,647	2,405	2,067	3,034	3,206	2,014	1,685
Santa Fe So. Pacific	163	322	312	229	240	232	170	304
Sun	3,069	958	1,034	808	1,394	871	512	593
Tenneco	970	1,886	1,224	922	833	694	247	277
Texaco	2,520	3,186	3,247	2,773	2,037	1,797	1,140	1,056
USX	710	948	900	1,032	1,403	1,066	440	507
Union Pacific	482	615	518	357	381	384	211	216
Union Texas Petroleum	170	201	155	171	294	139	98	115
Unocal	828	1,003	873	606	835	810	483	436
TOTAL	$28,634	$35,315	$35,506	$29,576	$31,916	$29,935	$15,830	$14,264

Source: Salomon Brothers Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-1987, 1988 Edition.

DOMESTIC OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 140	$ 148	$ 78	$ 109	$ 100	$ 37	$ 5	$ 53
Amoco Corp.	249	298	203	781	718	928	339	356
Anadarko Petroleum	42	64	69	42	40	47	51	40
Atlantic Richfield	487	318	201	336	428	525	18	49
British Petroleum	NA	NA	833	492	496	224	31	0
Burlington Northern	31	41	67	14	67	86	25	26
Chevron Corp.	499	1,281	385	442	281	61	22	42
Consolidated	42	39	16	49	48	148	20	60
DuPont (Conoco)	119	118	135	194	222	140	47	121
Enron	45	65	66	48	196	61	37	24
Enserch	10	19	17	31	77	55	17	22
Exxon	478	1,258	539	808	1,311	445	106	690
Kerr-McGee	53	58	45	87	34	136	11	30
Louisiana Land	61	128	61	39	44	41	28	11
Maxus Energy Corp.	131	126	211	0	35	40	8	15
Mesa	224	156	89	66	533	24	11	32
Mobil	1,324	598	1,087	690	0	93	62	65
Murphy	22	104	69	89	37	13	21	22
Occidental	249	171	44	68	45	42	44	24
Pennzoil	129	95	96	85	117	308	38	37
Phillips	203	800	148	1,056	341	25	13	28
Royal Dutch/Shell	422	627	422	367	1,256	1,277	496	323
Santa Fe So. Pacific	13	61	62	82	41	47	59	188
Sun	2,482	178	129	216	592	153	81	159
Tenneco	370	965	225	365	218	210	45	61
Texaco	902	543	692	865	399	125	59	104
USX	169	243	121	316	618	161	37	133
Union Pacific	95	145	92	99	54	54	7	55
Union Texas Petroleum	30	18	14	37	140	39	20	29
Unocal	258	192	174	127	274	121	24	38
TOTAL	$ 9,279	$ 8,857	$ 6,390	$ 8,000	$ 8,762	$ 5,666	$ 1,782	$2,837

Source: Salomon Brothers Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 20

DOMESTIC OUTLAYS FOR PETROLEUM EXPLORATION FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 171	$ 268	$ 148	$ 110	$ 163	$ 197	$ 90	$ 75
Amoco Corp.	1,083	1,334	1,191	1,047	1,299	1,359	710	643
Anadarko Petroleum	64	92	81	62	59	41	27	29
Atlantic Richfield	622	853	886	849	996	785	341	232
British Petroleum	NA	NA	460	500	592	689	315	399
Burlington Northern	37	50	132	42	97	71	30	23
Chevron Corp.	1,217	1,496	1,371	1,007	997	685	351	294
Consolidated Nat. Gas	45	73	103	85	73	64	65	89
DuPont (Conoco)	135	138	288	251	269	284	177	145
Enron	53	82	140	106	62	35	17	19
Enserch	28	41	44	50	66	77	51	40
Exxon	760	954	932	780	1,032	1,108	491	333
Kerr-McGee	89	105	192	67	93	95	50	30
Louisiana Land	202	271	176	124	125	111	42	42
Maxus Energy Corp.	89	173	170	69	80	92	45	37
Mesa	120	177	134	102	67	45	7	5
Mobil	627	996	1,207	798	523	504	282	167
Murphy	67	91	109	95	81	66	28	35
Occidental	333	552	106	184	184	150	86	55
Pennzoil	69	115	95	59	66	58	19	29
Phillips	312	404	397	344	317	234	130	128
Royal Dutch/Shell	499	611	637	631	614	716	458	438
Santa Fe So. Pacific	65	120	72	47	63	58	29	35
Sun	159	203	327	173	255	236	166	156
Tenneco	159	312	309	177	185	116	67	60
Texaco	610	1,062	1,240	871	851	603	339	264
USX	204	304	347	297	291	263	93	122
Union Pacific	148	147	157	129	166	130	78	74
Union Texas Petroleum	61	84	76	70	104	56	44	37
Unocal	206	281	268	198	223	231	127	130
TOTAL	$8,234	$11,389	$11,795	$9,324	$9,993	$9,159	$4,755	$4,165

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 21

DOMESTIC OUTLAYS FOR PETROLEUM DEVELOPMENT FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 85	$ 125	$ 184	$ 125	$ 135	$ 103	$ 40	$ 41
Amoco Corp.	915	1,237	933	644	810	1,120	781	816
Anadarko Petroleum	69	90	92	71	63	56	38	34
Atlantic Richfield	935	1,157	1,769	1,101	1,230	1,461	703	395
British Petroleum	NA	NA	1,344	1,271	1,096	1,144	1,020	495
Burlington Northern	38	116	218	23	51	146	41	46
Chevron Corp.	1,141	1,654	1,611	1,018	1,410	1,060	589	575
Consolidated Nat. Gas	36	51	59	84	151	120	81	73
DuPont (Conoco)	382	188	389	228	314	425	222	171
Enron	87	109	139	86	104	91	34	44
Enserch	52	91	80	67	93	122	74	86
Exxon	1,056	1,935	2,572	1,875	1,773	2,843	1,350	668
Kerr-McGee	56	107	88	60	59	26	25	15
Louisiana Land	184	282	242	112	107	84	35	34
Maxus Energy Corp.	130	225	220	87	73	123	54	61
Mesa	165	295	274	109	61	44	6	17
Mobil	621	837	971	779	820	816	710	557
Murphy	26	35	44	23	40	35	12	13
Occidental	228	259	69	127	276	224	144	119
Pennzoil	205	191	202	96	104	116	82	76
Phillips	306	415	517	368	284	348	166	143
Royal Dutch/Shell	1,153	1,409	1,346	1,069	1,164	1,213	1,060	924
Santa Fe So. Pacific	85	141	178	100	136	127	82	81
Sun	428	577	578	419	547	482	265	278
Tenneco	441	609	690	380	430	368	135	156
Texaco	1,008	1,581	1,315	1,037	787	1,069	742	688
USX	337	401	432	419	494	642	310	252
Union Pacific	239	323	269	129	161	200	126	87
Union Texas Petroleum	79	99	65	64	50	44	34	49
Unocal	364	530	431	281	338	458	332	268
TOTAL	$10,851	$15,069	$17,321	$12,252	$13,161	$15,110	$9,293	$7,262

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 22

WORLDWIDE OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS AND EXPLORATION AND DEVELOPMENT ACTIVITIES FOR 30 LARGE ENERGY COMPANIES

(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 769	$ 991	$ 812	$ 645	$ 675	$ 705	$ 266	$ 358
Amoco Corp.	3,471	4,031	3,546	3,482	4,056	4,865	2,723	2,638
Anadarko Petroleum	183	251	244	177	168	154	120	109
Atlantic Richfield	2,256	2,525	3,243	2,812	3,119	3,154	1,475	929
British Petroleum	NA	NA	4,395	3,496	3,351	3,498	2,865	2,417
Burlington Northern	106	207	417	79	215	303	96	95
Chevron Corp.	4,105	5,938	4,955	3,882	3,783	2,642	1,624	1,608
Consolidated Nat. Gas	123	163	178	218	272	332	166	222
DuPont (Conoco)	1,321	629	1,341	1,175	1,303	1,325	954	1,113
Enron	248	354	435	276	464	247	102	101
Enserch	96	154	164	167	246	269	147	151
Exxon	4,595	6,824	6,940	5,648	6,536	6,924	3,792	4,614
Kerr-McGee	342	459	466	312	279	360	149	154
Louisiana Land	511	803	602	369	354	321	140	137
Maxus Energy Co.	513	818	1,070	278	436	439	271	194
Mesa	516	636	509	277	661	113	24	54
Mobil	3,793	3,777	4,835	3,550	2,232	2,261	1,800	1,497
Murphy	272	303	325	318	275	230	104	125
Occidental	1,350	1,735	691	737	800	888	583	384
Pennzoil	420	424	419	262	330	523	159	168
Phillips	1,325	2,251	1,684	2,309	1,258	893	485	497
Royal Dutch/Shell	4,895	5,755	5,447	4,485	5,362	6,324	4,242	3,712
Santa Fe So. Pacific	163	322	312	229	240	232	170	304
Sun	3,231	1,063	1,166	925	1,648	1,285	771	680
Tenneco	1,025	2,208	1,367	1,027	925	884	363	394
Texaco	3,640	4,089	4,194	3,570	2,836	2,391	1,703	1,544
USX	1,039	1,541	1,372	1,500	1,822	1,588	791	805
Union Pacific	482	615	518	357	381	384	211	216
Union Texas Petroleum	381	417	398	366	486	368	206	170
Unocal	1,217	1,358	1,411	1,163	1,309	1,245	708	708
TOTAL	$42,338	$50,651	$53,456	$44,091	$45,822	$45,147	$27,210	$26,098

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

DOMESTIC OIL AND GAS FINDING COSTS EXCLUDING PROPERTY ACQUISITION COSTS(1) FOR 30 LARGE ENERGY COMPANIES
(Dollars Per Barrel of Oil Equivalent)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 7.35	$5.75	$19.53	$28.78	$11.25	$13.85	$6.05	$3.80
Amoco Corp.	7.17	6.77	7.62	4.52	6.30	9.11	NM	3.77
Anadarko Petroleum	8.67	23.74	6.29	7.06	5.59	3.40	1.67	4.73
Atlantic Richfield	5.44	8.60	5.46	7.28	4.21	NM	3.15	1.38
British Petroleum	NA	NA	NA	9.37	3.62	49.76	NM	1.88
Burlington Northern	4.05	8.16	21.88	0.19	6.94	8.19	32.77	5.38
Chevron Corp.	8.69	13.56	14.03	7.49	4.56	8.07	13.09	5.16
Consolidated Nat. Gas	5.59	7.15	14.29	2.82	7.68	4.72	4.66	4.93
DuPont (Conoco)	4.97	7.41	6.02	6.22	7.05	9.62	39.90	3.50
Enron	9.77	36.97	18.20	12.39	6.51	2.92	1.74	6.30
Enserch	2.77	4.63	7.22	5.48	2.42	3.47	3.23	4.64
Exxon	6.46	5.96	9.24	4.82	6.15	9.99	6.16	NM
Kerr-McGee	5.37	21.93	21.54	14.11	91.20	23.42	NM	6.28
Louisiana Land	18.53	13.71	10.90	6.10	11.23	7.36	4.44	11.69
Maxus Energy Corp.	7.38	10.47	29.62	17.02	7.46	10.93	3.76	6.32
Mesa	7.18	12.10	3.81	10.55	5.82	1.51	NM	1.01
Mobil	6.06	5.95	9.56	7.30	6.79	9.55	4.34	3.45
Murphy	9.15	12.60	16.39	6.00	10.68	13.47	18.46	4.17
Occidental	22.59	19.86	75.00	13.23	5.49	6.43	2.41	2.59
Pennzoil	6.55	7.65	3.96	7.38	9.36	6.69	27.55	7.59
Phillips	7.99	7.38	7.11	7.75	4.47	14.92	14.32	3.27
Royal Dutch/Shell	4.41	8.79	6.58	6.05	6.15	6.40	6.84	4.29
Santa Fe So. Pacific	6.67	14.37	12.30	7.23	9.87	8.47	6.59	6.00
Sun	7.28	9.47	11.01	11.31	8.25	6.39	13.40	9.50
Tenneco	6.03	8.49	9.87	5.79	5.36	3.19	7.44	4.50
Texaco	NM	17.68	20.91	18.03	68.73	12.23	9.41	4.18
USX	7.71	10.96	11.05	9.40	7.52	5.20	4.62	6.23
Union Pacific	4.61	5.34	8.81	6.62	7.55	7.95	NM	NM
Union Texas Petroleum	16.15	12.34	35.25	12.56	10.87	5.13	8.67	5.49
Unocal	6.49	10.86	9.73	5.04	6.79	7.57	8.01	4.89
TOTAL	$ 7.31	$ 8.85	$11.06	$6.31	$5.96	$15.63	$14.06	$6.12

NM = Not meaningful

$$\text{Finding Costs} = \frac{\text{Outlays for Petroleum Exploration and Development}}{\text{Reserves Additions from Extensions \& Discoveries, Improved Recovery and Revisions}}$$

(1) This table has been changed to reflect oil and gas finding costs excluding property acquisition costs, which gives a more accurate assessment of true finding costs.

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 24

WORLDWIDE OIL AND GAS FINDING COSTS EXCLUDING PROPERTY ACQUISITION COSTS(1) FOR 30 LARGE ENERGY COMPANIES
(Dollars Per Barrel of Oil Equivalent)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$13.48	$ 8.50	$34.86	$16.85	$18.39	$10.48	$3.15	$2.75
Amoco Corp.	5.65	5.20	7.80	5.72	7.23	6.96	34.13	3.97
Anadarko Petroleum	8.69	22.32	6.18	7.04	5.11	3.43	1.71	4.29
Atlantic Richfield	5.36	8.61	4.99	6.64	4.78	NM	3.76	1.79
British Petroleum	NA	NA	NM	6.26	2.66	6.22	NM	2.60
Burlington Northern	4.05	8.16	21.88	0.19	6.94	8.19	32.77	5.38
Chevron Corp.	7.83	10.70	8.96	5.64	5.58	5.76	12.06	4.92
Consolidated Nat. Gas	5.59	7.15	14.29	2.82	7.68	4.72	4.66	4.93
DuPont (Conoco)	13.44	6.69	8.66	5.60	5.03	6.81	NM	3.79
Enron	7.25	14.92	13.19	7.09	8.35	NM	2.07	6.17
Enserch	2.88	4.58	7.93	6.04	2.57	3.67	3.45	4.82
Exxon	2.97	10.22	5.79	3.97	5.53	6.24	6.32	NM
Kerr-McGee	6.00	38.10	30.80	7.67	NM	16.69	NM	16.17
Louisiana Land	14.97	16.37	12.34	7.53	7.42	12.78	6.05	7.00
Maxus Energy Corp.	6.97	10.18	21.22	7.69	5.71	11.08	4.82	4.81
Mesa	7.36	11.95	3.91	10.13	5.30	1.53	NM	1.01
Mobil	4.10	2.70	18.98	4.87	6.24	10.49	3.31	3.76
Murphy	NM	8.89	7.93	7.93	9.82	11.94	NM	3.61
Occidental	17.77	18.94	12.50	7.19	2.67	3.90	2.22	2.07
Pennzoil	6.52	7.81	4.22	7.98	11.14	7.20	22.65	8.43
Phillips	NM	14.07	8.83	6.14	5.49	27.49	2.20	2.44
Royal Dutch/Shell	8.19	7.87	11.24	4.30	3.39	8.63	4.92	2.38
Santa Fe So. Pacific	6.67	14.37	12.30	7.23	9.87	8.47	6.59	6.00
Sun	11.20	9.83	10.94	6.80	7.29	7.24	15.94	9.00
Tenneco	6.55	8.03	10.22	6.18	5.88	3.64	6.84	5.43
Texaco	NM	8.28	22.79	12.35	21.36	8.63	6.56	3.86
USX	4.81	14.89	16.12	5.44	9.60	6.70	7.86	5.90
Union Pacific	4.61	5.34	8.81	6.62	7.55	7.95	NM	NM
Union Texas Petroleum	8.09	12.70	NM	6.35	9.27	9.23	4.81	4.01
Unocal	9.44	7.73	34.79	7.85	7.79	6.03	5.22	3.62
TOTAL	$6.70	$ 7.59	$10.85	$5.35	$5.29	$9.49	$8.92	$4.21

NA = Not Available
NM = Not Meaningful

$$\text{Finding Costs} = \frac{\text{Outlays for Petroleum Exploration and Development}}{\text{Reserves Additions from Extensions \& Discoveries, Improved Recovery and Revisions}}$$

(1) This table has been changed to reflect oil and gas finding costs excluding property acquisition costs, which gives a more accurate assessment of true finding costs.

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

BASIC PETROLEUM DATA BOOK

SECTION VI. PRICES

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Section VI
Table 1

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES CRUDE OIL
CURRENT AND CONSTANT 1967 DOLLARS
(U.S. dollars per U.S. barrel of 42 gallons)

Year	Price in Current Dollars	Producer Price Index All Commodities(1) (1967 = 100)	Price in 1967 Constant Dollars
1947	$1.93	76.5	$2.52
1948	2.60	82.8	3.14
1949	2.54	78.7	3.23
1950	2.51	81.8	3.07
1951	2.53	91.1	2.78
1952	2.53	88.6	2.86
1953	2.68	87.4	3.07
1954	2.78	87.6	3.17
1955	2.77	87.8	3.15
1956	2.79	90.7	3.08
1957	3.09	93.3	3.31
1958	3.01	94.6	3.18
1959	2.90	94.8	3.06
1960	2.88	94.9	3.03
1961	2.89	94.5	3.06
1962	2.90	94.8	3.06
1963	2.89	94.5	3.06
1964	2.88	94.7	3.04
1965	2.86	96.6	2.96
1966	2.88	99.8	2.89
1967	2.92	100.0	2.92
1968	2.94	102.5	2.87
1969	3.09	106.5	2.90
1970	3.18	110.4	2.88
1971	3.39	113.9	2.98
1972	3.39	119.1	2.85
1973	3.89	134.7	2.89
1974	6.74	160.1	4.21
1975	7.56	174.9	4.32
1976	8.14	182.9	4.45
1977	8.57	194.2	4.41
1978	8.96	209.3	4.28
1979	12.51	235.6	5.31
1980	21.59	268.7	8.03
1981	31.77	293.4	10.83
1982	28.52	299.3	9.53
1983	26.19	303.1	8.64
1984	25.88	310.3	8.34

(1) For 1976 and prior years figures are for Wholesale Price Index.

Source: Current Dollar Price, U.S. Energy Information Administration
Producer Price Index, U.S. Bureau of Labor Statistics
Constant Dollar Price computed by American Petroleum Institute

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES CRUDE OIL
CURRENT AND CONSTANT 1967 DOLLARS
(U.S. dollars per U.S. barrel of 42 gallons)

Year	Price in Current Dollars	Producer Price Index All Commodities(1) (1967 = 100)	Price in 1967 Constant Dollars
1985	$24.09	308.8	$ 7.80
1986	12.51	300.9	4.16
1987	15.41	307.7	5.01

Source: Current Dollars Price--U.S. Energy Information Administration
Producer Price Index--U.S. Bureau of Labor Statistics
Constant Dollar Price computed by American Petroleum Institute

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES NATURAL GAS
CURRENT AND CONSTANT 1967 CENTS
(U.S. cents per thousand cubic feet)

Year	Price in Current Cents	Producer Price Index(2) All Commodities (1967 = 100)	Price in 1967 Constant Cents
1947	6.0	76.5	7.8
1948	6.5	82.8	7.9
1949	6.3	78.7	8.0
1950	6.5	81.8	7.9
1951	7.3	91.1	8.0
1952	7.8	88.6	8.8
1953	9.2	87.4	10.5
1954	10.1	87.6	11.5
1955	10.4	87.8	11.8
1956	10.8	90.7	11.9
1957	11.3	93.3	12.1
1958	11.9	94.6	12.6
1959	12.9	94.8	13.6
1960	14.0	94.9	14.8
1961	15.1	94.5	16.0
1962	15.5	94.8	16.4
1963	15.8	94.5	16.7
1964	15.4(1)	94.7	16.3
1965	15.6	96.6	16.1
1966	15.7	99.8	15.7
1967	16.0	100.0	16.0
1968	16.4	102.5	16.0
1969	16.7	106.5	15.7
1970	17.1	110.4	15.5
1971	18.2	113.9	16.0
1972	18.6	119.1	15.6
1973	21.6	134.7	16.0
1974	30.4	160.1	19.0
1975	44.5	174.9	[illegible].4
1976	58.0	182.9	31.7
1977	79.0	194.2	40.7
1978	90.5	209.3	43.2
1979	117.8	235.6	50.0
1980	159.0	268.7	59.2
1981	198.0	293.4	67.5
1982	246.0	299.3	82.2
1983	259.0	303.1	85.5
1984	266.0	310.3	85.7

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(1) For 1964 and prior years, volumes were reported on the basis of 14.65 p.s.i. For 1965 and subsequent years, volumes were reported on the basis of 14.73 p.s.i.

(2) For 1976 and prior years, figures are for Wholesale Price Index.

Source: Current Price, U.S. Energy Information Administration.
Producer Price Index, U.S. Bureau of Labor Statistics
Constant Price computed by the American Petroleum Institute

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES NATURAL GAS
CURRENT AND CONSTANT 1967 DOLLARS
(U.S. cents per thousand cubic feet)

Year	Price in Current Cents	Producer Price Index* All Commodities (1967 = 100)	Price in 1967 Constant Cents
1985	251.0	308.8	81.3
1986	194.0	300.9	64.5
1987	167.0	307.7	54.3

Source: Current Price--U.S. Energy Information Administration
Producer Price Index*--U.S. Bureau of Labor Statistics
Constant Price computed by the American Petroleum Institute

Section VI
Table 3

REFINER ACQUISITION COST OF CRUDE OIL
(Dollars per Barrel)

Year	Domestic	Imported	Composite
1968(1)	3.21	2.90	3.17
1969	3.37	2.80	3.29
1970	3.46	2.96	3.40
1971	3.68	3.17	3.60
1972	3.67	3.22	3.58
1973	4.17	4.08	4.15
1974	7.18	12.52	9.07
1975	8.39	13.93	10.38
1976	8.84	13.48	10.89
1977	9.55	14.53	11.96
1978	10.61	14.57	12.46
1979	14.27	21.67	17.72
1980	24.23	33.89	28.07
1981	34.33	37.05	35.24
1982	31.22	33.55	31.87
1983	28.87	29.30	28.99
1984	28.53	28.88	28.63
1985	26.65	27.03	26.76
Jan.	26.89	26.51	27.02
Feb.	26.39	27.05	26.53
Mar.	26.61	27.23	26.77
Apr.	26.79	27.61	27.04
May	26.90	27.62	27.11
Jun.	26.50	27.27	26.69
Jul.	26.67	26.46	26.61
Aug.	26.45	26.62	26.50
Sep.	26.39	26.59	26.44
Oct.	26.59	26.80	26.65
Nov.	26.72	27.12	26.85
Dec.	26.91	26.60	26.82

(1) Not available prior to 1968.

Source: U.S. Department of Energy--Annual Energy Review and Monthly Energy Review.

REFINER ACQUISITION COST OF CRUDE OIL
(Dollars per Barrel)

Year	Domestic	Imported	Composite
1986	14.83	13.98	14.55
Jan.	25.94	24.92	25.64
Feb.	20.42	18.02	19.81
Mar.	15.11	14.21	14.87
Apr.	13.06	13.14	13.08
May	12.99	13.17	13.05
Jun	13.11	12.25	12.82
Jul.	11.82	10.91	11.51
Aug.	11.95	11.87	11.92
Sep.	13.27	12.85	13.11
Oct.	13.20	12.78	13.05
Nov.	13.21	13.46	13.30
Dec.	13.67	14.16	13.85
1987	17.77	18.16	17.91
Jan.	16.02	16.43	16.17
Feb.	16.76	16.96	16.82
Mar.	16.93	17.24	17.03
Apr.	17.21	17.88	17.43
May	17.64	18.24	17.84
Jun	18.34	18.71	18.47
Jul	19.05	19.25	19.14
Aug.	19.41	19.30	19.36
Sep.	18.58	18.55	18.57
Oct.	18.37	18.57	18.45
Nov.	17.95	18.16	18.03
Dec.	17.03	17.45	17.19
1988	14.73	14.71	14.73
Jan.	15.82	16.10	15.92
Feb.	15.61	15.61	15.72
Mar.	14.92	14.82	14.88
Apr.	15.88	15.69	15.81
May	16.35	16.02	16.22
Jun	15.83	15.52	15.71
Jul	14.65	14.80	14.71
Aug.	14.36	14.37	14.36
Sep.	13.97	13.90	13.94
Oct.	12.90	13.03	12.96
Nov.	12.61	12.54	12.58
Dec.(p)	13.90	14.08	13.98

(p) Preliminary.

Source: U.S. Department of Energy--Annual Energy Review and Monthly Energy Review.

Section VI
Table 4

TREND OF WHOLESALE PRICES OF COMMODITIES UTILIZED IN THE PRODUCTION OF PETROLEUM
(1967 = 100)

Year	Oil Field Machinery and Tools	Line Pipe Carbon	Oil Well Casing Carbon	Oil Well Casing Alloy
1947	54.9	N.A.	N.A.	N.A.
1948	59.5	N.A.	N.A.	N.A.
1949	62.9	N.A.	N.A.	N.A.
1950	64.3	N.A.	N.A.	N.A.
1951	70.8	N.A.	N.A.	N.A.
1952	70.9	N.A.	N.A.	N.A.
1953	73.9	N.A.	N.A.	N.A.
1954	76.5	76.0	69.2	66.0
1955	79.7	80.6	72.8	70.4
1956	84.7	91.9	77.7	77.7
1957	90.5	102.2	86.2	87.9
1958	91.0	105.5	89.8	91.6
1959	91.1	105.1	91.6	93.4
1960	91.2	104.1	91.6	93.4
1961	92.5	102.9	89.5	91.3
1962	93.8	103.5	88.0	89.7
1963	93.3	105.9	88.8	90.6
1964	94.8	103.6	91.9	93.4
1965	95.2	97.9	96.2	97.9
1966	96.5	97.9	96.2	97.9
1967	100.0	100.0	100.0	100.0
1968	106.4	104.0	101.5	102.5
1969	112.7	109.2	104.5	106.4
1970	118.7	113.2	109.1	111.2
1971	122.6	124.7	120.7	122.7
1972	127.3	133.7	128.4	131.1
1973	133.2	139.1	133.2	136.3
1974	157.8	189.8	170.7	181.3

N.A. Not available

Source: U.S. Bureau of Labor Statistics, Wholesale Price Index

TREND OF WHOLESALE PRICES OF COMMODITIES UTILIZED IN THE PRODUCTION OF PETROLEUM

(1967 = 100)

Year	Oil Field Machinery and Tools	Line Pipe Carbon	Oil Well Casing Carbon	Oil Well Casing Alloy
1975	196.3	226.9	211.5	220.1
1976	217.7	234.6	223.1	239.2
1977	236.6	260.5	244.3	270.0
1978	261.6	296.6	271.6	299.6
1979	289.6	303.4	285.2	316.9
1980	335.5	336.2	326.9	366.9
1981	401.0	394.0	407.6	501.7
1982	439.6	416.8	451.9	584.0
1983	427.9	406.3	406.1	455.7
1984	425.0	405.6	386.4	416.8
1985	426.3	405.1	381.4	386.6
1986	415.5	402.7	355.2	386.0
1987	410.0	405.5	370.0	359.7(p)

(p) Based on partial data.

Source: U.S. Bureau of Labor Statistics, Producer Price Index

TREND OF REGULAR GRADE GASOLINE PRICES VS. PRICES OF OTHER CONSUMER GOODS AND SERVICES

	RETAIL PRICE OF REGULAR GRADE GASOLINE			PRICE INDEXES OF SOME OTHER CONSUMER ITEMS				
Year	Service Station Price Excl. Taxes	State and Federal Taxes	Service Station Price Incl. Taxes	All Items	Food	Rent	Apparel and Upkeep	Reading and Recreation
		Cents per Gallon				Index: 1967 = 100		
1947	16.93	6.18	23.11	66.9	70.6	61.1	78.2	68.7
1948	19.54	6.34	25.88	72.1	76.6	65.1	83.3	72.2
1949	20.27	6.52	26.79	71.4	73.5	68.0	80.1	74.9
1950	20.08	6.68	26.76	72.1	74.5	70.4	79.0	74.4
1951	20.31	6.84	27.15	77.8	82.8	73.2	86.1	76.6
1952	20.04	7.32	27.36	79.5	84.3	76.2	85.3	76.9
1953	21.28	7.41	28.69	80.1	83.0	80.3	84.6	77.7
1954	21.56	7.48	29.04	80.5	82.8	83.2	84.5	76.9
1955	21.42	7.65	29.07	80.2	81.6	84.3	84.1	76.7
1956	21.57	8.36	29.93	81.4	82.2	85.9	85.8	77.8
1957	22.11	8.85	30.96	84.3	84.9	87.5	87.3	80.7
1958	21.47	8.91	30.38	86.6	88.5	89.1	87.5	83.9
1959	21.18	9.31	30.49	87.3	87.1	90.4	88.2	85.3
1960	20.99	10.14	31.13	88.7	88.0	91.7	89.6	87.3
1961	20.53	10.23	30.76	89.6	89.1	92.9	90.4	89.3
1962	20.36	10.28	30.64	90.6	89.9	94.0	90.9	91.3
1963	20.11	10.31	30.42	91.7	91.2	95.0	91.9	92.8
1964	19.98	10.37	30.35	92.9	92.4	95.9	92.7	95.0
1965	20.70	10.45	31.15	94.5	94.4	96.9	93.7	95.9
1966	21.57	10.51	32.08	97.2	99.1	98.2	96.1	97.5
1967	22.55	10.61	33.16	100.0	100.0	100.0	100.0	100.0
1968	22.93	10.78	33.71	104.2	103.6	102.4	105.4	104.7
1969	23.85	10.99	34.84	109.8	108.9	105.7	111.5	108.7
1970	24.55	11.14	35.69	116.3	114.9	110.1	116.1	113.4
1971	25.20	11.23	36.43	121.3	118.4	115.2	119.8	119.3
1972	24.46	11.67	36.13	125.3	123.5	119.2	122.3	122.8
1973	26.88	11.94	38.82	133.1	141.4	124.3	126.8	125.9
1974	40.41	12.00	52.41	147.7	161.7	130.6	136.2	133.8

Sources: Retail Price of Regular Grade Gasoline, Platt's Oil Price Handbook and Oilmanac.
Price Indexes, U.S. Department of Labor, Bureau of Labor Statistics

TREND OF REGULAR GRADE GASOLINE PRICES VS. PRICES OF OTHER CONSUMER GOODS AND SERVICES

	RETAIL PRICE OF REGULAR LEADED GASOLINE			PRICE INDEXES OF SOME OTHER CONSUMER ITEMS				
Year	Service Statio Price Excl. Taxes	State and Federal Taxes	Service Station Price Incl. Taxes	All Items	Food	Rent	Apparel and Upkeep	Enter-tainment(2)
		Cents per Gallon				Index: 1967 = 100		
1975	45.44	11.77	57.22	161.2	175.4	137.3	142.3	144.4
1976	47.44	12.03	59.47	170.5	180.8	144.7	147.6	151.2
1977	50.70	12.37	63.07	181.5	192.2	153.3	154.2	157.9
1978	53.09	12.62	65.71	195.4(1)	211.4	164.0	159.6	176.6
1979	74.33	13.46	87.79	217.4	234.5	176.0	166.6	188.5
1980	104.73	14.37	119.10	246.8	254.6	191.6	178.4	205.3
1981	N.A.	N.A.	131.10	272.3	274.6	208.2	186.9	221.4
1982	N.A.	N.A.	122.20	289.1	285.7	224.0	191.8	235.8
1983	95.36	20.34	115.70	298.4	291.7	236.9	196.5	246.0
1984	91.46	20.84	112.90	311.1	302.9	249.3	200.2	255.1
1985	89.64	21.86	111.50	322.2	309.8	264.6	206.0	265.0
1986	63.63	22.07	85.70	328.4	319.7	280.0	207.8	274.1
1987	66.33	23.37	89.70	340.5	332.9	291.4	217.4	NA

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(1) Beginning in July, 1978, the CPI was given in two forms, CPI-U & CPI-W. The index used above is the CPI-U.
(2) Represented "Reading and Recreation" prior to July 1978.
N.A. Not available

Source: Retail price of regular grade gasoline at full-service stations, Platt's Oil Price Handbook and Oilmanac
1979-80 retail price of regular grade gasoline at full-service stations, Platt's/Lundberg Summary from Platt's Oil Price Handbook
1981-1987 -- retail price of regular grade gasoline, Bureau of Labor Statistics
Price indexes, U.S. Department of Labor, Bureau of Labor Statistics

U.S. ANNUAL AVERAGE RETAIL PRICE OF #2 HOME HEATING OIL

Year	Cost per Gallon(1) (current cents)	Consumer Price Index (1967 = 100)	Cost Per Gallon (1967 constant cents)
1956(2)	15.21	81.4	18.69
1957	15.98	84.3	18.96
1958	15.07	86.6	17.40
1959	15.29	87.3	17.51
1960	15.02	88.7	16.93
1961	15.62	89.6	17.43
1962	15.62	90.6	17.24
1963	15.97	91.7	17.42
1964	16.06	92.9	17.29
1965	16.04	94.5	16.97
1966	16.43	97.2	16.90
1967	16.91	100.0	16.91
1968	17.44	104.2	16.74
1969	17.82	109.8	16.23
1970	18.48	116.3	15.89
1971	19.63	121.3	16.18
1972	19.72	125.3	15.74
1973	22.75	133.1	17.09
1974	36.01	147.7	24.38
1975	38.98	161.2	24.18
1976	41.80	170.5	24.52
1977	47.37	181.5	26.10
1978	50.80(e)	195.4	26.00
1979	72.80	217.4	33.49
1980	100.97	246.8	40.91
1981	124.66	272.4	45.76
1982	120.86	289.1	41.81
1983	110.12	298.4	36.90
1984	111.97	311.1	35.99
1985	107.55	322.2	33.38
1986	83.45	328.4	25.41
1987	85.15	340.4	25.01

(e) Estimate.
(1) Includes all applicable taxes.
(2) Data prior to 1956 is not available on a comparable basis.

Source: U.S. Department of Labor, Bureau of Labor Statistics
BLS Monthly prices averaged by API to derive annual average price

Section VI
Table 7

TOTAL DOLLAR VALUE OF U.S. CRUDE OIL AND NATURAL GAS AT THE WELLHEAD

	VALUE (Thousand dollars)		PRODUCTION (Trillion BTU)		PRICE AT WELLHEAD (Cents per million BTU)		PRICE AT WELLHEAD (1967 constant cents per million BTU)	
Year	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas
1947	$3,577,890	$274,709	10,771	5,012	33.2	5.5	43.4	7.2
1948	5,245,080	333,173	11,717	5,615	44.8	5.9	54.1	7.1
1949	4,674,770	344,034	10,683	5,911	43.8	5.8	55.7	7.4
1950	4,963,380	408,521	11,449	6,841	43.4	6.0	53.1	7.3
1951	5,690,410	542,964	13,037	8,106	43.6	6.7	47.9	7.4
1952	5,785,230	623,649	13,282	8,705	43.6	7.2	49.2	8.1
1953	6,327,100	774,966	13,671	9,116	46.3	8.5	53.0	9.7
1954	6,424,930	882,501	13,427	9,488	47.9	9.3	54.7	10.6
1955	6,870,380	978,357	14,445	10,532	47.6	9.3	54.2	10.6
1956	7,296,760	1,083,812	15,344	11,252	47.6	9.6	52.5	10.6
1957	8,079,259	1,201,759	15,346	11,885	52.6	10.1	56.4	10.8
1958	7,379,973	1,317,521	14,154	12,244	52.1	10.8	55.1	11.4
1959	7,473,336	1,556,800	14,662	13,361	51.0	11.7	53.8	12.3
1960	7,420,181	1,789,970	14,664	14,135	50.6	12.7	53.3	13.4
1961	7,565,582	1,996,241	15,185	14,691	49.8	13.6	52.7	14.4
1962	7,774,051	2,145,301	15,495	15,365	50.2	14.0	53.0	14.8
1963	7,965,743	2,328,030	15,741	16,271	50.6	14.3	53.5	15.1
1964	8,017,078	2,387,689	15,691	17,138	51.1	13.9	54.0	14.7
1965	8,158,298	2,494,542	15,930	17,652	51.2	14.1	53.0	14.6
1966	8,726,423	2,702,759	16,925	18,984	51.6	14.2	51.7	14.2
1967	9,375,727	2,898,741	18,100	20,087	51.8	14.4	51.8	14.4
1968	9,794,826	3,168,688	18,593	21,548	52.7	14.7	51.4	14.3
1969	10,426,680	3,455,615	18,886	22,838	55.2	15.1	51.8	14.2
1970	11,173,726	3,745,680	20,401	24,154	54.8	15.5	49.6	14.0
1971	11,692,998	4,085,482	20,033	24,805	58.4	16.5	51.3	14.5
1972	11,706,510	4,180,462	20,041	24,792	58.4	16.9	49.0	14.2
1973	13,057,905	4,894,072	19,493	24,746	67.0	19.8	49.7	14.7
1974	21,580,549	6,573,402	18,575	23,689	116.2	27.7	72.6	17.3

Sources: Dollar value and production, U.S. Bureau of Mines
U.S. Bureau of Labor Statistics, Wholesale Price Index
Price at wellhead computed by the American Petroleum Institute

Section VI
Table 7a

TOTAL DOLLAR VALUE OF U.S. CRUDE OIL AND NATURAL GAS AT THE WELLHEAD

	VALUE (Thousand dollars)		PRODUCTION (Trillion BTU)		PRICE AT WELLHEAD (Cents per million BTU)		PRICE AT WELLHEAD (1967 constant cents per million BTU)	
Year	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas
1975	$23,116,059	$ 8,945,062	17,729	20,531	130.4	43.6	74.5	24.9
1976	24,229,540	11,571,776	17,262	20,371	140.4	56.8	76.7	31.0
1977	25,790,722	15,824,954	17,454	20,025	147.8	77.4	76.1	39.9
1978	28,477,824	18,084,914	18,420	20,393	154.4	88.7	73.8	42.4
1979	39,051,332	24,113,634	18,064	20,901	216.7	115.4	92.0	49.0
1980	65,722,016	32,043,704	18,249	20,482	360.2	156.4	134.1	58.2
1981	99,396,384(1)	39,551,253	18,147	20,255	547.8	190.3	186.7	64.9
1982	90,029,512(1)	45,496,765	18,309	18,797	491.7	242.0	164.3	80.9
1983	82,745,734(1)	43,614,369	18,325	18,757	451.5	288.8	149.0	95.3
1984	84,102,132(1)	48,404,611	18,848	20,217	446.2	295.0	143.8	95.1
1985	78,851,236(1)	43,182,598	18,992	19,124	415.2	279.1	134.5	90.4
1986	39,634,833(1)	32,607,825	18,376	18,638	215.7	215.3	71.7	71.6
1987	46,960,095(1)	28,888,630	17,675	19,292	265.7	185.7	86.4	60.4

(1) Estimate computed by API based on wellhead price times production.

Sources: Dollar value and production, U.S. Energy Information Administration
Producer Price Index, U.S. Bureau of Labor Statistics
Price at wellhead computed by the American Petroleum Institute

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-	$2.90
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	$1.58	2.20
Arizona	-	-	-	-		-	-	-	-	-	-	-	-	-
Arkansas	$1.82	$2.48	$2.48	$2.46	$2.48	$2.46	$2.60	$2.73	$2.71	$2.69	$2.92	$2.82	$2.77	$2.77
California	1.72	2.42	2.26	2.16	2.25	2.23	2.49	2.55	2.50	2.62	3.05	2.90	2.55	2.46
Colorado	1.89	2.56	2.55	2.55	2.54	2.55	2.71	2.77	2.75	2.78	3.02	2.99	2.90	2.90
Florida	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	2.10	2.77	2.77	2.77	2.77	2.76	2.89	2.98	2.91	2.93	3.12	3.00	2.99	2.96
Indiana	2.10	2.77	2.77	2.76	2.75	2.75	2.93	2.96	2.91	2.93	3.13	3.01	2.97	2.94
Kansas	1.93	2.60	2.58	2.57	2.57	2.56	2.69	2.81	2.80	2.79	3.01	3.00	2.91	2.90
Kentucky	2.11	2.77	2.76	2.76	2.77	2.76	2.91	2.92	2.89	2.91	3.13	2.95	2.81	2.85
Louisiana	2.01	2.68	2.66	2.65	2.65	2.64	2.81	2.93	2.93	2.93	3.32	3.26	3.16	3.14
Michigan	2.13	2.86	2.75	2.70	2.72	2.66	2.92	2.96	2.92	2.87	3.06	2.94	2.94	2.91
Mississippi	1.76	2.41	2.46	2.31	2.24	2.23	2.36	2.50	2.46	2.45	2.91	2.86	2.84	2.83
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana	1.94	2.58	2.58	2.52	2.47	2.25	2.16	2.20	2.26	2.58	2.70	2.65	2.56	2.41
Nebraska	1.85	2.43	2.21	2.13	2.33	2.44	2.71	2.75	2.75	2.79	2.98	2.94	2.88	2.87
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	1.77	2.45	2.44	2.43	2.45	2.47	2.63	2.75	2.74	2.75	2.99	2.98	2.85	2.85
New York	4.21	4.94	3.56	3.78	4.23	4.23	4.28	3.42	3.55	4.40	4.73	4.23	4.24	4.64
North Dakota	-	-	-	-	-	2.00	2.00	2.14	2.89	2.90	3.13	2.99	2.80	2.71
Ohio	3.36	4.22	2.93	3.03	3.05	2.99	2.69	2.76	2.89	3.14	3.23	2.89	2.87	2.97
Oklahoma	1.92	2.58	2.56	2.57	2.57	2.56	2.70	2.79	2.78	2.78	3.03	2.96	2.92	2.92
Pennsylvania	4.19	4.96	3.57	3.82	4.25	4.25	4.29	3.42	3.54	4.34	4.73	4.10	4.20	4.55
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	1.95	2.61	2.59	2.59	2.58	2.58	2.73	2.84	2.84	2.83	3.11	3.06	2.98	2.96
Utah	-	-	-	-	-	-	-	-	-	-	2.27	2.99	2.86	2.74
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	3.90	4.76	3.09	3.33	3.76	3.76	3.81	2.93	3.05	3.86	4.26	3.49	3.60	4.07
Wyoming	1.68	2.33	2.28	2.16	2.15	2.18	2.37	2.45	2.41	2.44	2.66	2.61	2.50	2.51
Other	1.53	2.00	2.00	2.00	2.00	2.00	2.09	2.29	2.18	2.26	2.90	2.93	2.94	2.45
Total	1.93	2.60	2.54	2.51	2.53	2.53	2.68	2.78	2.77	2.79	3.09	3.01	2.90	2.88

Source: U.S. Bureau of Mines. Annual Petroleum Statements

Section VI
Table 8a

U.S. AVERAGE WELLHEAD VALUE PER BARRELOF CRUDE OIL BY STATE

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	$2.75	$2.59	$2.59	$2.60	$2.61	$2.60	$2.65	$2.67	$2.70	$2.84	$3.00	$3.07	$3.58	$8.54	$10.13	10.57	9.67	10.77	14.94	20.57
Alaska	2.79	3.04	3.04	3.04	3.06	3.06	3.13	2.82	2.90	3.01	3.24	3.23	3.62	4.92	5.22	5.03	5.84	6.02	10.74	15.63
Arizona	-	-	-	-	2.85	2.80	2.80	2.85	2.90	2.96	3.17	2.25	3.86	5.25	5.25	5.25	5.25	5.92	8.29	12.30
Arkansas	2.75	2.66	2.66	2.66	2.66	2.66	2.70	2.73	2.83	2.87	3.11	3.15	3.92	7.43	8.88	9.65	9.93	12.94	14.73	24.17
Calif.	2.43	2.50	2.48	2.43	2.38	2.35	2.31	2.35	2.45	2.54	2.72	2.71	3.11	5.30	6.03	6.15	7.31	7.22	12.60	22.72
Colorado	2.88	2.88	2.88	2.88	2.88	2.91	2.92	2.95	3.12	3.18	3.39	3.41	4.25	7.57	9.60	9.65	10.10	9.92	13.14	20.69
Florida	-	-	-	-	-	-	-	-	-	-	-	3.18	4.59	9.66	11.71	11.24	11.67	12.00	13.07	18.84
Illinois	2.99	2.98	2.98	2.93	2.93	3.00	3.04	3.07	3.18	3.25	3.47	3.47	4.32	8.87	10.48	10.18	12.27	13.80	23.49	35.36
Indiana	2.98	2.98	2.96	2.85	2.84	3.00	2.98	3.05	3.19	3.20	3.42	3.42	3.92	8.62	10.54	10.89	12.46	13.29	23.56	35.15
Kansas	2.89	2.91	2.91	2.92	2.92	2.95	3.00	3.02	3.20	3.27	3.52	3.52	4.25	7.96	9.50	9.50	10.00	13.20	22.00	34.21
Kentucky	2.97	2.95	2.92	2.87	2.87	2.85	2.90	2.93	3.11	3.15	3.36	3.36	3.97	8.72	11.19	11.42	13.02	13.73	22.58	34.98
Louisiana	3.15	3.15	3.12	3.11	3.10	3.11	3.12	3.14	3.30	3.38	3.59	3.59	4.00	6.53	7.09	7.51	8.33	9.42	11.40	19.38
Michigan	2.92	2.85	2.85	2.81	2.79	2.87	2.89	2.95	3.07	3.10	3.27	3.20	4.07	8.59	10.74	10.84	11.00	12.34	14.94	21.55
Miss.	2.82	2.78	2.76	2.67	2.64	2.65	2.72	2.80	2.92	2.99	3.15	3.15	3.81	6.10	6.66	7.14	8.20	8.11	13.95	15.80
Missouri	-	.	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
Montana	2.42	2.42	2.44	2.43	2.43	2.44	2.50	2.57	2.69	2.78	3.01	3.07	3.33	6.65	7.83	8.42	8.58	9.25	12.39	22.24
Nebraska	2.85	2.83	2.83	2.70	2.66	2.72	2.75	2.79	2.98	3.09	3.38	3.38	3.87	6.83	9.01	8.99	10.46	11.40	16.75	30.49
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
New Mex.	2.86	2.88	2.88	2.87	2.81	2.84	2.92	2.95	3.13	3.20	3.40	3.41	4.10	7.22	8.29	8.84	9.23	10.01	14.06	23.82
New York	4.76	4.60	4.59	4.44	4.44	4.57	4.58	4.63	4.52	4.52	4.70	4.81	5.60	10.65	12.22	12.25	14.20	14.74	23.78	37.39
N. Dakota	2.72	2.75	2.73	2.48	2.50	2.55	2.60	2.64	2.80	3.05	3.27	3.28	3.90	6.04	7.32	7.84	8.00	8.55	12.00	14.99
Ohio	3.09	3.10	3.15	2.93	2.94	3.00	3.17	3.19	3.29	3.34	3.60	3.76	5.08	9.83	11.89	11.77	13.16	13.81	22.52	36.23
Oklahoma	2.91	2.92	2.91	2.90	2.89	2.91	2.93	2.99	3.12	3.19	3.40	3.41	3.78	7.18	8.52	9.19	9.98	10.90	15.03	27.38
Penn.	4.71	4.57	4.56	4.32	4.32	4.45	4.49	4.49	4.52	4.52	4.66	4.77	5.62	10.41	12.15	12.16	14.29	14.77	24.09	37.44
S. Dakota	-	-	-	2.00	2.00	2.00	2.38	2.15	2.29	2.34	2.59	2.62	3.59	6.65	12.70	12.35	12.00	12.13	25.28	28.75
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.51	13.72	13.75	12.70	20.26	34.29
Texas	2.97	2.99	2.97	2.96	2.96	2.97	3.01	3.04	3.21	3.28	3.48	3.48	3.98	6.95	7.64	8.59	8.78	9.29	12.62	21.59
Utah	2.75	2.74	2.72	2.62	2.61	2.64	2.63	2.67	2.80	2.81	3.04	3.04	3.61	7.11	8.23	9.30	9.33	9.98	11.41	19.80
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Va.	4.14	4.00	3.99	3.85	3.85	3.98	4.00	3.97	3.83	3.80	3.91	4.50	5.02	10.15	11.99	12.00	13.97	14.50	28.00	37.00
Wyoming	2.50	2.49	2.50	2.53	2.50	2.56	2.58	2.64	2.80	2.93	3.10	3.09	3.82	6.53	7.24	7.24	7.62	9.16	8.50	21.37
Other	2.31	2.10	2.06	2.14	2.10	2.19	2.28	2.30	2.47	2.52	2.91	2.89	3.48	8.72	6.33	11.22	10.98	9.82	12.41	19.14
Total	2.89	2.90	2.89	2.88	2.86	2.88	2.92	2.94	3.09	3.18	3.39	3.39	3.89	6.74	7.56	8.14	8.57	8.96	12.51	20.89

(1) Included with other.

Source: U.S. Bureau of Mines. Annual Petroleum Statements

Section VI
Table 8b

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE
(Dollars per Barrel)

STATE	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Alabama	$10.57	$9.67	$10.52	$11.79	$20.57	$35.80	$32.32	$30.07	$29.39	$25.77	$13.91
Alaska	5.03	6.14	5.23	10.25	16.52	23.60	20.08	17.92	18.13	17.12	6.71
Arizona(1)	5.25	5.25	5.92	8.29	12.30	24.00	31.00	30.00	28.00	27.00	15.15
Arkansas	9.65	9.93	10.63	14.72	24.17	33.69	30.12	28.28	28.15	25.79	14.54
California	6.15	7.31	8.58	12.78	23.87	26.80	24.58	22.61	22.09	22.14	11.90
Colorado	9.65	10.10	10.84	13.28	22.91	35.69	31.56	28.92	28.09	25.64	13.98
Florida(1)	11.24	11.67	12.00	13.07	18.84	25.00	32.00	31.10	31.00	29.00	23.13
Illinois	10.18	12.27	13.81	23.49	35.78	36.03	31.69	29.12	28.76	26.90	14.70
Indiana	10.89	12.46	13.70	23.28	35.91	36.07	31.66	29.06	28.72	26.82	14.55
Kansas	9.50	10.00	13.20	21.57	34.20	35.80	30.79	28.45	27.99	25.33	14.02
Kentucky	11.42	13.02	13.73	22.55	34.98	35.90	31.19	28.60	28.24	26.20	14.20
Louisiana	7.51	8.33	9.03	11.42	19.87	35.45	32.44	30.02	29.67	27.22	15.32
Michigan	10.84	11.00	11.86	14.47	23.54	35.74	31.80	28.93	28.54	26.16	14.61
Mississippi	7.14	8.20	7.91	10.74	20.85	30.47	29.04	26.76	27.26	25.51	13.63
Missouri(1)	13.30	12.50	12.25	25.68	37.75	34.38	31.25	31.20	27.50	25.00	15.25
Montana	8.42	8.58	9.04	12.03	20.53	34.69	31.25	28.80	28.07	25.29	13.58
Nebraska	8.99	10.46	11.40	18.13	30.60	35.32	30.98	28.58	27.83	25.42	13.70
Nevada(1)	10.35	11.50	12.00	11.54	16.65	23.96	23.95	23.80	25.80	26.00	12.00
New Mexico	8.84	9.23	10.17	14.33	24.06	35.04	31.82	29.26	28.69	26.84	14.93
New York	12.25	14.20	14.74	23.78	37.39	34.15	30.91	28.19	27.70	25.19	16.03
North Dakota	7.84	8.00	9.75	13.64	26.42	35.63	31.89	29.27	28.39	25.32	13.54
Ohio	11.77	13.16	13.80	22.79	36.64	36.11	30.90	28.14	27.71	25.11	15.51
Oklahoma	9.19	9.98	11.30	17.53	29.25	35.43	32.04	29.67	29.11	26.28	14.47
Pennsylvania	12.16	14.29	14.72	24.13	37.46	36.03	30.77	28.28	27.71	25.05	15.77
South Dakota	12.35	12.00	12.16	15.35	28.81	35.55	31.63	29.10	28.36	25.79	13.81
Tennessee(1)	13.72	13.75	12.70	20.26	34.29	33.00	32.10	32.00	29.00	26.00	15.00
Texas	8.59	8.78	9.29	12.65	21.84	35.06	31.77	29.35	28.87	26.80	14.73
Utah	9.30	9.33	9.98	11.41	19.79	34.14	30.50	28.12	27.21	23.98	13.33
Virginia(1)	11.68	12.50	12.50	24.80	37.21	36.25	32.35	32.25	27.28	24.75	15.00
West Virginia	12.00	13.97	14.48	23.35	36.92	35.63	29.98	27.27	26.90	24.35	14.68
Wyoming	7.24	7.62	9.16	11.73	21.34	32.30	29.37	27.19	26.73	24.67	12.94
U.S. TOTAL	8.15	8.57	9.00	12.64	21.59	31.77	28.52	26.19	25.88	24.09	12.51

(1) Beginning in 1981, these figures were estimated by IPAA (including years proir to 1981).
Note: Data represent the average first purchase prices of crude at the lease or wellhead.

Source: Department of Energy, Energy Information Administration, Petroleum Marketing Monthly.

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE
(Dollars per Barrel)

State	1987
Alabama	16.76
Alaska	10.95
Arizona(2)	17.35
Arkansas	17.23
California	13.91
Colorado	17.71
Florida(2)	16.05
Illinois	17.53
Indiana	17.49
Kansas	17.37
Kentucky	17.19
Louisiana	17.97
Michigan	17.63
Mississippi	16.78
Missouri(2)	17.25
Montana	16.57
Nebraska	17.07
Nevada(2)	11.50
New Mexico	17.58
New York	17.40
North Dakota	16.74
Ohio	17.42
Oklahoma	17.62
Pennsylvania	17.43
South Dakota	16.96
Tennessee(2)	15.84
Texas	17.54
Utah	17.25
Virginia(2)	15.75
West Virginia	16.56
Wyoming	16.44
U.S. TOTAL	15.41

(2) Prices for these states was estimated by the IPAA
Note: Data represent the average first purchase prices of crude at the lease or wellhead.

Source: Department of Energy, Energy Information Administration.

Section VI
Table 9

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	-	-	-	5.0	5.0	4.0	5.0	6.0	7.1	7.9	6.4	9.2	9.7	7.3
Alaska	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0	12.2
Arizona	-	-	-	-	-	-	-	-	-	14.0	-	-	-	-
Arkansas	3.6	4.5	4.0	3.5	4.0	4.1	5.3	5.5	5.6	6.0	7.2	8.1	8.7	11.9
California	10.2	11.3	11.8	11.9	14.6	16.7	19.7	20.6	22.2	22.5	23.7	23.3	24.6	26.7
Colorado	7.9	6.0	5.2	3.9	4.3	5.5	5.8	8.7	9.9	9.8	10.0	10.5	11.0	11.9
Florida	3.2	3.7	4.1	5.2	7.3	6.7	6.8	8.3	10.4	8.3	13.0	13.6	14.3	16.2
Illinois	9.2	12.3	11.3	10.1	15.3	16.2	16.8	14.2	12.9	15.1	15.5	14.8	13.9	12.5
Indiana	9.1	9.8	7.4	7.0	9.8	9.5	7.0	6.0	12.4	12.1	13.1	15.6	19.0	17.8
Kansas	5.1	5.0	5.4	6.6	8.1	8.3	8.6	10.6	11.1	11.3	11.4	11.4	12.0	11.7
Kentucky	15.0	18.4	19.1	19.7	21.7	21.7	21.9	22.8	23.7	23.1	23.8	24.1	23.7	24.4
Louisiana	3.6	3.9	4.4	5.3	5.8	6.7	8.2	8.9	11.3	11.4	11.2	12.9	15.4	17.1
Maryland	-	-	-	19.8	20.0	19.4	19.0	20.2	20.1	25.3	26.2	26.9	27.0	26.6
Michigan	12.7	14.7	15.2	13.2	14.8	14.6	16.4	17.8	11.5	13.3	18.8	18.6	23.0	21.4
Mississippi	5.0	5.6	6.2	6.3	6.3	6.1	8.0	8.3	9.6	9.8	10.3	13.9	15.5	18.8
Missouri	13.2	18.5	16.7	14.3	14.3	18.8	20.0	18.8	20.0	16.7	16.7	-	-	25.0
Montana	4.6	4.6	5.6	5.3	5.5	6.1	5.9	6.8	6.1	6.8	7.2	6.8	7.5	7.1
Nebraska	-	-	-	11.8	12.8	13.3	13.5	11.7	20.4	21.0	16.0	15.0	15.9	17.5
New Mexico	1.8	2.7	2.9	3.0	3.8	4.6	6.1	7.8	8.9	8.8	9.4	10.4	10.0	10.7
New York	24.3	22.1	24.6	25.1	25.1	29.2	31.6	32.6	29.5	28.3	28.4	30.6	30.5	30.9
North Dakota	3.2	3.0	5.2	5.1	5.2	6.1	6.8	6.3	7.7	8.1	9.5	9.7	9.9	11.4
Ohio	19.7	19.7	19.3	19.4	20.2	21.7	22.2	21.2	22.5	24.0	23.7	21.4	23.2	23.5
Oklahoma	3.9	4.9	4.7	4.9	5.3	5.4	6.9	7.0	7.4	8.0	8.3	10.1	10.0	11.9
Pennsylvania	23.7	24.1	25.6	25.3	27.7	28.3	29.1	29.9	29.9	32.2	31.1	28.3	29.2	31.8
South Dakota	6.0	6.5	6.3	-	5.0	5.0	5.0	5.0	-	-	-	-	-	-
Tennessee	6.3	9.4	9.1	10.0	9.4	10.3	12.0	11.5	12.9	12.9	15.8	16.7	16.7	17.5
Texas	3.7	4.5	4.6	4.7	5.4	6.2	7.6	8.5	8.0	8.7	9.7	10.0	10.8	11.3
Utah	5.4	6.0	6.0	6.0	6.6	7.5	11.4	14.1	13.9	14.1	14.7	14.7	14.2	18.0
Virginia	9.4	9.5	7.7	8.7	15.6	24.6	25.8	27.1	26.8	27.7	26.8	27.0	26.2	27.1
West Virginia	15.4	16.7	16.2	16.8	18.6	19.6	23.6	23.8	23.5	23.7	23.8	24.8	26.0	26.2
Wyoming	5.0	5.9	5.6	6.0	7.5	7.8	7.9	8.4	8.5	8.6	8.7	8.4	8.1	12.0
Total	6.0	6.5	6.3	6.5	7.3	7.8	9.2	10.1	10.4	10.8	11.3	11.9	12.9	14.0

Source: U.S. Bureau of Mines, Minerals Yearbooks and Natural Gas Annuals

Section VI
Table 9a

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	7.4	9.8	11.8	10.9	12.7	12.8	12.7	13.1	13.4	13.9	15.1	35.2	38.2	74.3	87.0	98.5
Alaska	20.4	21.4	24.7	27.6	24.8	24.8	25.0	25.3	25.9	24.6	14.7	14.7	14.9	17.0	30.2	38.9
Arizona	-	11.9	12.1	12.0	12.1	13.8	15.4	16.1	17.5	17.1	17.8	18.1	18.4	20.0	28.0	28.2
Arkansas	13.5	14.9	15.5	15.6	15.6	15.6	15.3	15.6	15.8	16.3	17.1	17.3	18.4	26.0	34.7	53.0
California	28.3	29.0	29.3	30.1	30.9	31.0	29.7	30.9	30.6	32.1	32.6	36.8	37.3	44.0	70.0	94.0
Colorado	11.6	11.6	11.7	11.9	12.9	13.0	13.3	13.5	14.5	14.7	15.6	16.5	17.7	20.0	26.0	48.0
Florida	18.9	20.7	20.0	13.5	12.9	14.2	14.8	15.2	15.7	-	29.9	32.0	34.3	53.6	97.3	98.2
Illinois	12.8	14.3	12.9	11.6	11.7	11.9	11.7	12.6	14.1	15.7	28.0	28.0	35.0	40.0	70.0	98.5
Indiana	20.1	21.1	23.4	23.6	23.6	23.7	23.4	23.4	23.6	23.7	16.5	15.5	13.8	14.0	39.0	52.0
Kansas	12.5	12.4	13.3	12.6	13.3	13.5	13.4	13.8	13.9	14.0	14.4	14.4	15.5	16.6	17.2	42.0
Kentucky	24.8	24.8	23.9	23.7	23.6	23.7	24.0	25.0	25.1	24.6	25.1	25.1	35.0	50.0	54.0	55.0
Louisiana	18.7	19.7	19.8	19.1	18.2	18.3	18.5	18.9	19.2	19.3	20.2	20.4	22.4	30.7	42.3	46.0
Maryland	27.2	27.0	26.9	26.7	25.2	26.0	25.6	25.6	25.4	24.9	20.0	20.9	23.3	24.0	27.0	32.3
Michigan	21.1	21.3	27.1	25.4	25.1	15.2	24.7	25.1	25.7	26.7	26.4	30.7	39.2	50.4	63.4	89.5
Mississippi	18.6	19.0	18.0	17.4	17.3	17.4	17.3	16.7	17.6	18.4	20.9	21.8	22.9	29.5	49.6	71.0
Missouri	24.7	25.0	27.0	24.3	24.5	-	24.5	28.6	13.8	24.5	24.8	24.9	24.2	31.4	34.0	34.5
Montana	7.4	7.4	7.5	7.8	8.2	8.3	8.4	9.1	10.2	10.3	12.1	12.3	23.6	25.3	43.3	44.5
Nebraska	16.7	18.2	18.8	15.4	14.6	15.9	17.2	17.5	17.3	17.1	17.5	17.8	18.2	34.0	54.1	51.3
New Mexico	10.9	11.5	11.9	11.7	11.8	12.5	13.0	13.4	13.7	14.3	15.0	18.5	23.6	31.4	40.5	56.5
New York	29.5	28.1	29.5	31.0	30.8	31.0	31.3	31.9	30.0	30.3	30.0	32.6	35.0	55.0	74.0	113.0
North Dakota	12.6	13.7	19.1	22.1	16.0	16.2	16.4	16.5	16.2	16.4	16.7	16.8	19.7	19.9	23.0	34.0
Ohio	24.9	25.6	24.2	23.9	23.6	23.7	24.1	24.7	25.8	27.1	33.8	39.2	42.5	48.2	70.6	101.8
Oklahoma	12.1	12.8	13.0	12.7	13.8	14.0	14.3	14.2	15.3	15.6	16.3	16.3	18.9	28.0	32.0	50.2
Pennsylvania	29.4	27.2	26.0	27.3	26.7	28.4	28.1	27.8	17.6	27.9	27.2	30.3	42.0	44.0	67.5	68.5
Tennessee	18.3	18.5	18.9	19.5	19.0	-	19.0	19.4	19.6	19.9	22.1	30.0	30.0	36.0	43.0	71.0
Texas	12.3	12.3	12.5	12.5	12.9	13.0	13.2	13.5	13.7	14.4	16.1	16.4	20.4	31.1	51.9	71.8
Utah	15.7	16.8	18.2	13.7	12.5	12.7	13.2	15.8	15.4	15.1	16.7	17.0	19.1	41.2	48.0	50.5
Virginia	27.1	27.1	23.4	29.9	29.9	30.0	30.1	29.9	29.7	30.8	31.4	32.0	33.1	51.0	51.5	114.0
West Virginia	27.4	27.5	26.6	25.1	23.5	23.6	24.1	26.2	27.0	25.4	25.9	30.0	30.9	32.8	36.9	57.0
Wyoming	12.5	14.6	14.2	12.9	13.5	14.5	14.6	14.6	14.7	14.7	15.3	16.2	18.1	24.5	33.7	41.0
Total	15.1	15.5	15.8	15.4	15.6	15.7	16.0	16.4	16.7	17.1	18.2	18.6	21.6	30.4	44.5	58.0

Source: U.S. Bureau of Mines, Minerals Yearbooks and Natural Gas Annuals

Section VI
Table 9b

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	147.0	150.0	203.9	318.6	477.0	344.0	428.0	373.0	371.0	289.0	297.0
Alaska	40.2	52.1	51.8	73.2	62.0	63.0	73.0	73.0	74.0	50.0	94.0
Arizona	33.5	37.0	41.3	NA	NA	259.0	308.0	290.0	NA	NA	NA
Arkansas	58.5	75.0	95.9	69.6	181.0	213.0	229.0	254.0	255.0	251.0	229.0
California	116.9	135.7	170.5	217.0	257.0	309.0	357.0	380.0	336.0	289.0	237.0
Colorado	81.0	84.0	141.0	147.0	197.0	317.0	338.0	343.0	290.0	205.0	176.0
Florida	108.9	139.0	157.2	173.0	271.0	246.0	233.0	257.0	243.0	120.0	168.0
Illinois	120.0	129.0	186.1	190.0	247.0	262.0	284.0	278.0	277.0	257.0	224.0
Indiana	69.0	71.0	105.4	135.0	208.0	155.0	209.0	338.0	251.0	123.0	171.0
Kansas	48.5	57.0	75.6	77.2	92.0	151.0	157.0	149.0	127.0	121.0	115.0
Kentucky	55.0	58.0	94.7	89.3	101.0	152.0	151.0	170.0	239.0	188.0	182.0
Louisiana	70.3	83.6	111.5	160.7	207.0	260.0	267.0	273.0	266.0	221.0	178.0
Maryland	39.0	61.4	103.6	45.6	48.0	78.0	55.0	55.0	59.0	65.0	55.0
Michigan	101.0	119.7	174.0	235.5	286.0	319.0	358.0	376.0	360.0	360.0	324.0
Mississippi	73.0	114.6	160.0	231.7	321.0	391.0	378.0	347.0	317.0	213.0	194.0
Missouri	42.0	--	--	--	--	--	--	375.0	350.0	375.0	375.0
Montana	71.9	84.7	121.1	145.4	191.0	215.0	241.0	246.0	239.0	205.0	180.0
Nebraska	65.2	68.0	85.0	82.9	145.0	199.0	293.0	224.0	301.0	282.0	242.0
New Mexico	81.0	98.8	136.6	175.8	213.0	247.0	268.0	271.0	262.0	187.0	166.0
New York	116.0	119.0	126.6	194.9	267.0	375.0	385.0	400.0	337.0	339.0	200.0
North Dakota	35.3	46.2	128.0	118.8	194.0	230.0	227.0	226.0	190.0	135.0	130.0
Ohio	139.7	157.0	180.5	197.7	217.0	271.0	324.0	319.0	308.0	284.0	258.0
Oklahoma	79.0	90.2	112.4	150.7	188.0	274.0	283.0	272.0	247.0	171.0	147.0
Oregon	--	--	213.0	240.0	260.0	333.0	333.0	278.0	240.0	200.0	145.0
Pennsylvania	80.0	86.0	132.6	212.7	233.0	280.0	300.0	325.0	316.0	250.0	225.0
South Dakota	--	--	210.7	NA	275.0	308.0	337.0	367.0	251.0	246.0	271.0
Tennessee	74.0	164.0	170.0	176.0	255.0	300.0	250.0	350.0	248.0	178.0	131.0
Texas	90.3	99.5	123.4	156.5	187.0	217.0	236.0	245.0	233.0	165.0	147.0
Utah	61.2	64.3	71.6	111.7	110.0	306.0	340.0	408.0	352.0	290.0	188.0
Virginia	126.0	131.3	168.1	285.0	215.0	369.0	330.0	300.0	302.0	245.0	208.0
West Virginia	61.0	65.8	105.0	300.0	300.0	320.0	310.0	345.0	385.0	390.0	385.0
Wyoming	64.0	79.3	113.0	192.0	277.0	322.0	318.0	332.0	301.0	252.0	176.0
Total	79.0	90.5	117.8	159.0	198.0	246.0	259.0	266.0	251.0	194.0	167.0

Source: U.S. Energy Information Administraton, Natural Gas Annuals

POSTED PRICES OF KEY FOREIGN CRUDE OILS

(In U.S. $ per barrel. Postings in effect on dates shown or thereabouts.)
Prices are not actual sales prices, but prices posted by governments for computing oil company taxes.

CRUDE &		1970	1971(1)	1972	1973(1)				1974			1975		1977	
GRAVITY		31 Aug	15 Feb	20 Jan	1 Jan	1 Oct	16 Oct	1 Nov	1 Jan	1 July	1 Nov	1 Jan	1 Oct	1 Jan	1 July
PERSIAN/ARABIAN GULF CRUDES															
Saudi Arabia															
Arab Light	34o	1.80	2.18	2.48	2.59	3.01	5.12	5.18	11.65	11.25	11.25	11.25	12.38	13.00	13.66
Arab Berri	39	1.90	2.26	2.55	2.67	3.09	5.68	5.74	12.35	12.35	11.95	11.95	12.77	13.42	14.23
Arab Medium	31	1.59	2.09	2.37	2.48	2.88	4.90	4.96	11.56	11.56	11.16	11.16	12.23	12.57	13.25
Arab Heavy	27	1.47	1.97	2.24	2.35	2.73	4.63	4.68	11.44	11.44	11.04	11.04	12.09	12.23	12.92
Iran															
Iran Light	34	1.79	2.17	2.47	2.58	3.00	5.34	5.40	11.88	11.88	11.48	11.48	12.50	13.77	13.77
Iran Heavy	31	1.63	2.13	2.41	2.53	2.94	4.99	5.05	11.64	11.64	11.24	11.24	12.36	13.43	13.43
Kuwait															
Kuwait	31	1.59	2.09	2.37	2.48	2.88	4.90	4.96	11.55	11.55	11.15	11.15	12.26	NA	NA
Abu Dhabi															
Murban	39	1.88	2.24	2.54	2.65	3.08	6.05	6.11	12.64	12.64	12.24	11.69	12.82	13.44	14.26
Marine (Umm Shaif)	37	1.86	2.23	2.53	2.64	3.07	5.54	5.60	12.09	12.09	11.69	11.45	12.58	13.20	14.02
Zakum	40	1.92	2.27	2.57	2.69	3.12	5.96	6.03	12.57	12.57	12.17	11.59	12.72	13.34	14.16
Iraq															
Basrah	35	1.72	2.16	2.45	2.56	2.98	5.06	5.12	11.67	11.67	11.27	11.28	12.40	NA	NA
Qatar															
Dukhan	40	1.93	2.28	2.59	2.71	3.14	5.83	5.90	12.41	12.41	12.01	12.01	12.74	14.18	14.18
Marine	36	1.83	2.20	2.50	2.61	3.04	5.50	5.56	12.01	12.01	11.61	11.61	12.54	13.98	13.98
Oman															
Oman	34	1.84	2.22	2.52	2.63	3.06	5.74	5.80	12.30	12.30	11.90	11.90	12.51	13.68	13.98
MEDITERRANEAN & AFRICAN CRUDES															
Saudi Arabia															
Arab Light	34	2.17	2.37	3.37	3.45	4.21	7.15	7.23	13.65	13.65	13.25	13.25	13.25	NA	NA
Iraq															
Kirkuk	36	2.21	2.41	3.40	3.48	4.24	7.21	7.29	NA	NA	NA	NA	NA	NA	NA
Libya															
Libya	40	2.18	2.55	3.67	3.78	4.60	8.93	9.06	15.77	15.77	15.77	15.77	16.06	18.25	18.78
Nigeria															
Nigeria	34	2.17	2.42	3.18	3.56	4.29	8.31	8.40	14.69	14.69	14.69	14.69	13.07	NA	NA
VENEZUELAN CRUDES (Reference Prices)															
Venezuela															
Tia Juana	26	2.01	2.09	2.95	3.09	4.93	4.93	7.26	13.84	14.31	14.31	13.54	14.64	NA	NA
Tia Juana	31	2.19	2.27	3.09	3.25	5.20	5.20	7.56	14.36	14.91	14.91	14.13	15.58	NA	NA
Oficina	35	2.34	2.42	3.26	3.40	5.45	5.45	7.80	14.88	15.44	15.44	14.67	16.17	NA	NA

NA Not Available
(1) Representative postings. Does not include price changes for 1 June 1971; 1 April, 1 June, 1 July, 1 August, 1 December 1973.

Source: Petroleum Intelligence Weekly

POSTED PRICES OF KEY FOREIGN CRUDE OILS

(In U.S. $ per barrel. Postings in effect on dates shown or thereabouts.)
Prices are not actual sales prices, but prices posted by governments for computing oil company taxes.

CRUDE & GRAVITY		1979 1 Jan
PERSIAN/ARABIAN GULF CRUDES		
Saudi Arabia		
Arab Light	34°	14.34
Arab Berri	39	14.93
Arab Medium	31	13.91
Arab Heavy	27	13.57
Iran		
Iran Light	34	14.45
Iran Heavy	31	14.10
Kuwait		
Kuwait	31	NA
Abu Dhabi		
Murban	39	14.97
Marine (Umm Shaif)	37	14.72
Zakum	40	14.87
Iraq		
Basrah	35	NA
Qatar		
Dukhan	40	14.89
Marine	36	14.68
Oman		
Oman	34	14.68
MEDITERRANEAN & AFRICAN CRUDES		
Saudi Arabia		
Arab Light	34	NA
Iraq		
Kirkuk	36	NA
Libya		
Libya	40	19.72
Nigeria		
Nigeria	34	NA
VENEZUELAN CRUDES (Reference Prices)		
Venezuela		
Tia Juana	26	NA
Tia Juana	31	NA
Oficina	35	NA

NOTE:
Posted prices are no longer available

NA   Not Available

Source: Petroleum Intelligence Weekly

Section VI
Table 11

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

		1974				1975			1976		1977	
CRUDE & GRAVITY		1 Jan.	1 June	1 Oct.	1 Nov.	1 Jan.	1 Oct.	14 Feb.	1 June	1 Oct.	1 Jan.	1 July
						PERSIAN / ARABIAN CRUDES						
Saudi Arabia												
Arab Light	34o	10.95	11.05	10.84	10.46	10.46	11.51	11.51	11.51	11.51	12.09	12.70
Arab Berri	39	11.61	11.71	11.49	11.11	11.11	11.87	11.87	11.87	11.87	12.48	13.22
Arab Medium	31	10.87	10.97	10.75	10.38	10.38	11.33	11.33	11.28	11.28	11.69	12.32
Arab Heavy	27	10.76	10.85	10.64	10.27	10.27	11.14	11.14	11.14	11.04	11.37	12.02
Iran												
Iran Light	34	11.16	11.26	11.04	10.67	10.67	11.62	11.62	11.62	11.62	12.81	12.81
Iran Heavy	31	10.94	11.04	10.82	10.45	10.45	11.50	11.40	11.33	11.33	12.49	12.49
Kuwait												
Kuwait	31	10.85	10.95	10.74	10.37	10.37	11.30	11.30	11.23	11.23	12.37	12.27
Abu Dhabi												
Murban	39	11.88	11.88	11.75	11.38	10.87	11.92	11.92	11.92	11.92	12.50	13.26
Umm Shaif	37	11.36	11.36	11.24	10.87	10.65	11.70	11.70	11.70	11.70	12.28	13.04
Zakum	40	11.81	11.81	11.69	11.31	10.78	11.83	11.83	11.83	11.83	12.41	13.17
Iraq												
Basrah	35	10.97	10.97	10.86	10.48	10.48	11.45	11.45	11.45	11.46e	12.65e	12.65e
Kirkuk	36	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	11.60e	11.65	11.70e	12.89e	12.85e
Qatar												
Dukhan	40	11.67	11.67	11.55	11.17	11.17	11.85	11.85	11.85	11.85	13.19	13.19
Marine	36	11.29	11.29	11.17	10.80	10.80	11.66	11.66	11.66	11.66	13.00	13.00
Oman												
Oman	34	11.56	11.56	11.44	11.07	11.07	11.63	11.63	11.70	11.70e	12.74	13.00
						MEDITERRANEAN AND AFRICAN CRUDES						
Iraq												
Kirkuk	36	N.A.	N.A.	N.A.	N.A.	10.67	11.74e	11.95e	N.A.	N.A.	N.A.	13.50
Libya												
Brega	40	N.A.	N.A.	N.A.	N.A.	11.20	12.32	12.32	12.32	12.62	13.92	14.20
Nigeria												
Bonny	37	N.A.	N.A.	N.A.	N.A.	11.43	12.60	12.84	12.89	13.10	14.33	14.63
						OTHER CRUDES						
Indonesia												
Sumatra Light	35	10.80	10.80	12.60	12.60	12.60	12.80	12.80	12.80	12.80	13.55	13.55
Venezuela												
Tia Juana	26	N.A.	N.A.	N.A.	N.A.	11.62	11.39	11.12	11.22	11.65	12.72	12.71
Tia Juana	31	N.A.	N.A.	N.A.	N.A.	11.05	12.06	12.30	12.30	12.30	12.35	13.54
Oficina	35	N.A.	N.A.	N.A.	N.A.	11.49	12.54	12.80	12.80	12.80	13.99(2)	N.A.
Ecuador												
Oriente	30	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	11.60	11.60	13.00	13.00

e Estimates by PIW
N.A. Not available
(1) These are the governments' official prices applicable to sales to third parties and to crude sold back to companies still retaining and equity interest in Middle East oil producing ventures.
(2) Estimate by Petroleum Economist, October 1977

Source: Petroleum Intelligence Weekly

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE & GRAVITY		1979			1980		1981		1982	1983	1985
		1 Jan.	1 Apr.	1 July	1 Jan.	1 June	19 Feb.	1 Nov.	1 Jan.	Mar.	Feb.
PERSIAN / ARABIAN CRUDES											
Saudi Arabia											
Arab Light	34o	13.34	14.55	18.00	26.00	28.00	32.00	34.00	34.00	29.00	28.00
Arab Berri	39	14.06	16.47	21.32	27.52	29.52	33.52	35.60	35.40	29.50	28.11
Arab Medium	31	12.89	14.05	17.54	25.45	27.45	31.45	33.00	32.40	27.40	27.40
Arab Heavy	27	12.51	13.64	17.17	25.00	27.00	31.00	31.50	31.00	26.00	26.50
Iran											
Iran Light	34	13.45	16.57	22.00(e)	28.50	35.37	37.00	34.60	34.20	28.00	28.05
Iran Heavy	31	13.06	16.04	19.90(e)	27.77	34.37	36.00	33.40	32.30	27.30(e)	27.35
Kuwait											
Kuwait	31	12.83	15.80	19.49	25.50	29.50	35.50	33.00	32.30	27.30	27.30
Abu Dhabi											
Murban	39	14.10	17.10	21.56	27.56	31.56	36.56	35.70	35.50	29.56	28.15
Umm Shaif	37	13.78	16.88	21.36	27.36	31.36	36.36	35.50	35.30	29.36	28.05
Zakum	40	14.01	17.01	21.46	27.46	31.46	36.46	35.60	35.40	29.46	28.10
Iraq											
Basrah Light	35	13.29	15.70	19.96	25.96	29.96	35.96	34.67	32.65(e)	28.46(e)	
Kirkuk	36	13.52	15.95	21.25	26.18	30.18	37.50	35.11	34.93	29.83	
Qatar											
Dukhan	44	14.03	17.04	21.42	27.42	31.42	37.42	35.65	35.45	29.49	28.10
Marine	36	13.77	16.85	21.23	27.23	31.23	37.23	35.50	35.30	29.30	28.05
Oman											
Oman	36	13.65(e)	14.88(e)	N.A.	30.26	35.56	37.56	34.06	35.06	30.06	
MEDITERRANEAN AND AFRICAN CRUDES											
Libya											
Brega	40	14.69	18.25	23.45	34.67	36.67	41.00	37.50	37.00	30.50	
Nigeria											
Bonny	37	14.80	18.50	23.49	29.99	36.71	40.02	36.52	36.52	30.00	28.67
OTHER CRUDES											
Indonesia											
Sumatra Light	34	14.23(e)	15.51(e)	N.A.	27.50	31.50	35.00	35.00	35.00	29.53	28.53
Venezuela											
Tia Juana	26	13.36	15.76	19.31	25.20	29.28	32.88	32.88	32.88	27.88	27.60
Tia Juana	31	14.22	16.70	20.90	26.90	32.40	36.00	35.00	35.00	29.84	28.24
Oficina	34	14.69	17.21	22.45	28.75	34.25	38.06	37.06	37.06	31.09	28.80
Ecuador											
Oriente	30	13.18	20.60	N.A.	31.00	N.A.	39.30(e)	33.15	33.25	28.25	

N.A. Not Available.
(e) Estimate.
(1) These are the governments' official prices applicable to sales to third parties and to crude sold back to companies still retaining an equity interest in Middle East oil producing ventures. Some prices are retroactive to prior dates.

Source: Petroleum Intelligence Weekly

Section VI
Table 11b

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE AND GRAVITY		1987 Feb.
Saudi Arabia		
Arab Light	34%	17.52
Arab Berri	39	17.87
Arab Medium	31	16.92
Arab Heavy	27	16.27
Iran		
Iran Light	34	17.50
Iran Heavy	31	16.89
Kuwait		
Kuwait	31	16.67
Abu Dhabi		
Murban	39	17.92
Umm Shaif	37	17.30
Zakum	40	17.82
Iraq		
Basrah Light	35	17.30
Kirkuk	36	17.60
Qatar		
Dukhan	44	17.82
Marine	36	17.67
Oman		
Oman	36	17.63
		MEDITERRANEAN AND AFRICAN CRUDES
Libya		
Brega	40	18.67
Nigeria		
Bonny	37	18.92
		OTHER CRUDES
Indonesia		
Sumatra Lgt.	34	17.56
Venezuela		
Tia Juana	26	16.72
Tia Juana	31	17.62
Oficina	34	N.A.
Ecuador		
Oriente	30	17.02

N.A. Not available

Source: Petroleum Intelligence Weekly

Section VI
Table 12

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Cents per Gallon)

	1920	1930	1940	1950	1960	1970	1971	1972	1973	1974	1975	1976	1977
Average U.S.	29.83	19.95	18.41	26.76	31.13	35.69	36.43	36.13	38.82	52.41	57.22	59.47	63.07
Alabama, Birmingham	30.04	20.50	21.71	29.33	31.23	35.23	35.62	36.79	38.57	51.67	53.15	58.25	64.00
Arizona, Phoenix	32.50	20.71	21.25	26.47	26.57	35.07	35.90	35.40	38.28	51.32	57.73	60.48	63.65
Arkansas, Little Rock	30.42	17.63	20.83	29.17	29.48	34.32	35.57	34.65	36.98	50.66	57.34	60.32	64.40
California, Los Angeles	-	-	-	-	29.57	34.15	35.32	34.47	38.04	52.28	57.88	60.49	64.23
California, San Francisco	24.17	20.00	17.88	25.12	32.23	35.82	35.82	35.30	39.07	53.30	59.46	61.49	65.15
Colorado, Denver	31.42	19.50	18.38	26.46	33.40	33.73	36.48	35.15	38.87	52.25	58.18	61.23	64.07
Connecticut, Hartford	33.00	19.13	14.48	23.63	29.32	36.98	37.82	37.65	40.98	54.63	57.57	59.99	63.83
District of Columbia	29.46	17.23	15.08	25.36	30.32	35.73	36.05	37.65	39.07	54.33	58.48	60.40	64.31
Florida, Miami(2)	29.25	21.50	19.33	28.03	31.40	35.07	34.65	35.98	38.15	51.31	54.98	57.15	58.82
Georgia, Atlanta	30.04	22.17	20.42	29.71	31.87	35.01	36.23	36.15	38.57	52.59	58.23	58.99	63.65
Idaho, Boise	33.63	26.41	24.18	30.65	37.42	35.07	34.98	35.11	39.95	53.34	59.82	62.22	65.48
Illinois, Chicago	27.17	18.17	15.58	23.30	31.90	38.62	37.60	36.36	40.61	54.74	58.60	60.90	65.74
Indiana, Indianapolis	-	-	-	-	30.73	37.23	37.57	35.56	39.26	53.17	59.08	59.70	62.74
Iowa, Des Moines	27.42	18.33	16.70	25.08	31.57	35.32	36.32	37.23	38.45	51.17	57.32	60.33	64.79
Kansas, Wichita	26.80	15.30	14.99	24.70	29.15	32.98	32.98	32.40	37.78	51.17	57.32	61.33	63.49
Kentucky, Louisville	-	-	-	-	32.80	36.65	37.48	37.28	40.31	53.83	58.20	61.25	64.90
Louisiana, New Orleans	27.75	15.17	20.66	30.17	29.07	35.73	35.57	34.06	36.48	49.74	56.09	60.40	63.74
Maryland, Baltimore	29.58	18.77	17.88	25.74	31.65	35.65	36.07	37.65	39.23	51.21	56.70	58.48	62.46
Massachusetts, Boston	32.63	17.96	14.19	24.18	26.98	35.73	36.57	35.98	39.07	52.40	55.98	58.23	61.16
Michigan, Detroit	28.12	18.28	15.53	25.17	30.93	33.82	34.35	34.23	39.53	53.86	59.42	57.65	62.07
Mississippi, Jackson	-	-	-	-	32.23	35.48	37.52	34.91	38.48	52.09	54.17	57.15	62.29
Missouri, St. Louis	27.58	17.07	16.43	23.04	27.15	34.07	36.15	35.65	39.20	52.17	57.65	59.48	63.40
Montana, Great Falls	-	-	-	-	36.90	36.36	36.57	35.23	39.95	53.17	59.42	60.85	65.44
Nebraska, Omaha	27.25	20.08	17.97	26.75	32.53	37.82	37.40	37.48	40.03	53.17	59.40	63.15	66.15
New Hampshire, Manchester	32.04	21.12	16.02	24.97	30.07	36.40	38.23	37.65	40.07	54.48	56.48	59.40	62.98
New Jersey, Newark	29.88	17.12	15.78	23.18	28.32	37.40	38.07	36.32	38.57	52.30	54.73	55.65	59.40
New Mexico, Albuquerque	32.25	21.00	19.92	30.25	32.90	36.73	36.90	36.48	38.29	52.65	58.98	59.53	63.59
New York, Buffalo	30.92	18.07	16.30	26.15	27.92	36.11	36.28	37.15	40.07	55.38	58.65	61.37	64.61
New York, New York	31.92	17.36	16.11	26.50	31.40	36.93	39.18	44.56	43.73	59.75	61.15	61.81	64.31
North Carolina, Charlotte	31.33	20.94	20.32	29.37	31.03	35.32	37.36	37.31	39.32	51.99	56.76	60.42	61.95
Ohio, Cincinnati	-	-	-	-	31.40	36.65	37.90	37.90	38.65	53.36	57.19	57.23	60.65
Ohio, Cleveland	-	-	-	-	32.32	36.65	37.90	37.80	38.65	53.36	57.19	57.23	60.40
Oklahoma, Tulsa	27.75	19.25	14.58	26.75	30.48	35.07	35.07	34.73	37.53	50.33	56.44	59.46	63.74
Oregon, Portland	26.79	20.96	20.38	27.98	33.65	35.32	35.82	35.48	38.39	51.70	55.50	57.23	61.49
Pennsylvania, Philadelphia	32.00	20.58	15.49	25.19	28.48	36.48	37.23	36.74	37.90	52.88	53.90	56.73	61.40
Rhode Island, Providence	32.63	17.48	14.66	24.08	27.06	36.23	36.90	36.15	38.32	52.57	55.90	58.57	62.15
South Carolina, Charleston	29.17	20.86	20.10	28.07	30.94	34.32	35.73	36.65	38.40	52.88	54.39	57.90	61.23
Tennessee, Memphis	29.00	19.04	22.22	28.22	29.65	35.57	35.48	35.48	37.48	50.51	57.17	59.65	64.07
Texas, Dallas	-	-	-	-	29.23	32.73	33.90	33.15	34.37	47.17	53.53	56.40	59.90
Texas, El Paso	-	-	-	-	28.88	34.73	36.90	35.90	36.29	47.98	55.95	57.40	60.65
Texas, Houston	29.13	18.83	17.17	24.00	29.32	32.23	32.82	32.34	33.90	47.28	52.40	56.40	60.15
Utah, Salt Lake City	31.88	22.67	19.88	24.42	30.90	34.32	34.98	35.56	37.37	50.17	56.32	58.45	60.94
Virginia, Norfolk	30.08	19.86	20.38	27.33	31.23	35.57	35.23	36.90	39.48	52.73	56.23	60.07	63.98
Washington, Seattle	-	-	-	-	29.57	36.40	36.73	36.35	39.42	52.22	57.18	59.98	64.23
Washington, Spokane	28.92	23.83	21.92	30.63	36.73	36.40	36.57	35.95	39.07	52.72	56.68	60.13	63.87
West Virginia, Charleston	30.33	20.46	20.68	29.23	31.32	35.73	37.73	38.40	39.56	51.23	57.57	59.07	63.14
Wisconsin, Milwaukee	27.35	17.43	19.15	24.90	30.98	33.15	34.48	33.73	38.37	52.13	58.15	58.40	61.40

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(1) Regular grade gasoline at full service stations, retail price including tax.
(2) Prices prior to 1970 are for Jacksonville.
Source: Data for 1920-1950, Texaco Inc.; 1960-1977, Platt's Oilgram Price Service
Note: The list of selected cities has been changed.

Section VI
Table 12a

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Dollars per Gallon)

	1978		1979		1980		1981		1982		1983	
Area(2)	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded
U.S. City Average	.627	.670	.857	.903	1.191	1.245	1.311	1.378	1.222	1.296	1.157	1.241
Anchorage, Alaska	.744	.767	.921	.952	1.241	1.275	1.408	1.465	1.380	1.446	1.253	1.339
Atlanta, Ga.	.624	.668	.843	.890	1.197	1.251	1.328	1.397	1.234	1.319	1.143	1.248
Baltimore Md.	.613	.666	.844	.891	1.204	1.251	1.334	1.389	1.288	1.335	1.244	1.296
Boston, Ma.	.623	.660	.857	.899	1.199	1.241	1.337	1.391	1.234	1.283	1.155	1.225
Buffalo, NY.	.644	.687	.899	.948	1.235	1.280	1.336	1.394	1.248	1.306	1.222	1.288
Chicago Ill-NW Ind.	.680	.730	.925	.979	1.246	1.304	1.344	1.410	1.264	1.321	1.223	1.298
Cincinnati, Oh-Ky-Ind.	.618	.655	.842	.882	1.154	1.206	1.275	1.345	1.217	1.293	1.187	1.257
Cleveland, Oh	.621	.665	.839	.884	1.160	1.203	1.304	1.385	1.269	1.327	1.175	1.248
Dallas-Ft Worth, Tx	.579	.617	.789	.833	1.132	1.186	1.245	1.307	1.140	1.209	1.081	1.158
Denver-Boulder, Colo.	.612	.663	.838	.886	1.150	1.217	1.259	1.330	1.197	1.273	1.091	1.197
Detroit, Mich.	.643	.696	.891	.947	1.242	1.303	1.335	1.395	1.247	1.304	1.227	1.280
Honolulu, Hawaii	.759	.764	.937	.976	1.298	1.355	1.409	1.567	1.472	1.542	1.400	1.462
Houston, Tx	.567	.613	.794	.835	1.139	1.183	1.261	1.313	1.143	1.212	1.040	1.132
Kansas City, Mo-Kn	.604	.644	.843	.886	1.137	1.190	1.237	1.298	1.195	1.262	1.155	1.226
Los Angeles, Long Beach, Anaheim, Ca.	.644	.691	.892	.943	1.213	1.271	1.337	1.409	1.232	1.318	1.166	1.215
Miami, Fla	.611	.661	.841	.892	1.186	1.235	1.319	1.389	1.257	1.364	1.207	1.326
Milwaukee, Wisc	.595	.631	.819	.864	1.139	1.198	1.273	1.329	1.245	1.286	1.190	1.224
Minneapolis, St. Paul, Minn-Wisc.	.618	.654	.860	.901	1.175	1.231	1.294	1.360	1.253	1.328	1.211	1.284
New York, NY-NE N.J.	.632	.675	.882	.927	1.241	1.286	1.355	1.413	1.249	1.319	1.181	1.257
NE Penn	.610	.650	.837	.879	1.178	1.218	1.306	1.353	1.197	1.242	1.157	1.208
Philadelphia,Pa-NJ.	.618	.658	.855	.904	1.192	1.233	1.309	1.365	1.188	1.255	1.149	1.210
Pittsburgh, Pa.	.628	.663	.857	.893	1.205	1.242	1.356	1.409	1.234	1.312	1.147	1.233
Portland, Ore-Wash	.636	.681	.870	.907	1.193	1.226	1.317	1.381	1.257	1.337	1.121	1.230
St. Louis, Mo-Ill.	.607	.656	.851	.897	1.145	1.208	1.230	1.299	1.151	1.213	1.111	1.164
San Diego, Ca.	.636	.691	.881	.932	1.215	1.280	1.323	1.408	1.240	1.339	1.157	1.253
San Fran-Oakland, Ca.	.661	.717	.899	.561	1.243	1.310	1.355	1.436	1.260	1.353	1.154	1.290
Seattle-Everett, Wash.	.650	.677	.877	.917	1.211	1.253	1.335	1.401	1.227	1.271	1.145	1.182
Washington, DC-Md-Va.	.651	.702	.853	.906	1.224	1.276	1.334	1.393	1.256	1.304	1.232	1.288
Region (3)												
Northeast	.631	.672	.870	.913	1.220	1.260	1.344	1.396	1.238	1.298	1.181	1.248
North Central	.628	.671	.861	.910	1.183	1.244	1.303	1.370	1.233	1.298	1.191	1.261
South	.611	.654	.831	.863	1.172	1.223	1.293	1.360	1.196	1.272	1.132	1.217
West	.643	.695	.879	.936	1.201	1.267	1.323	1.405	1.233	1.325	1.132	1.238

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(1) Regular grade gasoline - leaded and unleaded
(2) Area is generally the SMSA. Los Angeles, Long Beach, Anaheim is a combination of two SMSA's and N.Y.-NE N.J. and Chicago-NW Ind. are the more extensive Standard Consolidated Areas.
(3) Regions are defined as the four Census regions.

SOURCE: U.S. Bureau of Labor Statistics

Section VI
Table 12b

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Dollars per Gallon)

Area(2)	1984		1985		1986		1987	
	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded
U.S. City Average	1.129	1.212	1.115	1.203	0.857	0.927	0.897	0.948
Anchorage, Alaska	1.204	1.294	1.180	1.237	0.950	0.997	NA	NA
Atlanta, Ga.	1.110	1.225	1.094	1.197	0.769	0.888	NA	NA
Baltimore, Md.	1.092	1.164	1.092	1.163	0.877	0.921	0.913	0.935
Boston, Ma.	1.078	1.175	1.082	1.173	0.857	0.922	0.883	0.929
Buffalo, N.Y.	1.174	1.249	1.145	1.208	0.861	0.890	NA	NA
Chicago, Ill-NW Ind.	1.206	1.284	1.176	1.258	0.912	0.953	0.969	1.004
Cincinnati, Oh-Ky-Ind.	1.153	1.218	1.090	1.149	0.812	0.853	NA	NA
Cleveland, Oh.	1.130	1.214	1.081	1.182	0.820	0.902	0.880	0.941
Dallas-Ft. Worth, Tx.	1.072	1.163	1.104	1.142	0.789	0.831	0.856	0.881
Denver-Boulder, Co.	1.049	1.164	1.056	1.155	0.788	0.873	NA	NA
Detroit, Mi.	1.236	1.278	1.173	1.264	0.833	0.944	0.859	0.972
Honolulu, Ha.	1.368	1.443	1.274	1.396	1.077	1.221	NA	NA
Houston, Tx.	1.015	1.116	1.023	1.092	0.753	0.796	0.852	0.880
Kansas City, Mo-Kn.	1.082	1.142	1.048	1.124	0.758	0.817	NA	NA
Los Angeles, Long Beach, Anaheim, Ca.	1.102	1.211	1.088	1.191	0.879	0.956	0.901	0.931
Miami, Fl.	1.126	1.215	1.115	1.205	0.895	0.953	0.949	0.983
Milwaukee, Wi.	1.147	1.202	1.129	1.197	0.857	0.899	NA	NA
Minneapolis, St. Paul, Mn-Wi.	1.171	1.223	1.174	1.247	0.902	0.965	NA	NA
New York, NY-NE N.J.	1.116	1.189	1.114	1.185	0.859	0.908	0.903	0.936
NE Pa.	1.137	1.204	1.142	1.227	0.869	0.910	NA	NA
Philadelphia, Pa-N.J.	1.141	1.213	1.113	1.164	0.869	0.880	0.891	0.895
Pittsburgh, Pa.	1.147	1.238	1.149	1.213	0.855	0.883	0.887	0.899
Portland, Or-Wa.	1.116	1.222	1.115	1.200	0.839	0.922	NA	NA
St. Louis, Mo-Ill.	1.086	1.142	1.064	1.137	0.797	0.865	0.854	0.897
San Diego, Ca.	1.162	1.212	1.119	1.248	0.876	1.004	NA	NA
San Fran-Oakland, Ca.	1.156	1.302	1.141	1.252	0.869	0.976	0.870	0.955
Seattle-Everett, Wa.	1.178	1.217	1.152	1.221	0.891	0.962	NA	NA
Washington, D.C.-Md-Va.	1.203	1.302	1.148	1.254	0.890	0.983	0.911	0.998
Region(3)								
Northeast	1.133	1.204	1.124	1.201	0.877	0.931	0.900	0.946
North Central	1.157	1.233	1.133	1.219	0.859	0.921	0.914	0.958
South	1.105	1.192	1.101	1.181	0.831	0.904	0.883	0.943
West	1.123	1.220	1.115	1.209	0.873	0.957	0.896	0.946

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(1) Regular grade gasoline--leaded and unleaded.

(2) Area is generally the SMSA. Los Angeles, Long Beach, Anaheim is a combination of two SMSA's and N.Y.-NE N.J. and Chicago-NW Ind. are the more extensive Standard Consolidated Areas.

(3) Regions are defined as the four Census Regions.

Source: U.S. Bureau of Labor Statistics

AVERAGE PRICE OF NATURAL GAS CONSUMED BY END USE SECTOR
(Dollars per Thousand Cubic Feet)

Year	Lease and Plant Fuel	Pipeline Fuel	Delivered to Consumers					Total Consumption
			Residential	Commercial(1)	Industrial	Electric Utilities	Total	
1967	0.15	0.20	1.04	0.74	0.34	0.28	0.57	0.53
1968	0.16	0.20	1.04	0.73	0.34	0.22	0.55	0.51
1969	0.18	0.21	1.05	0.74	0.35	0.27	0.57	0.53
1970	0.18	0.21	1.09	0.77	0.37	0.29	0.59	0.55
1971	0.19	0.22	1.15	0.82	0.41	0.32	0.63	0.59
1972	0.20	0.23	1.21	0.88	0.45	0.34	0.68	0.63
1973	0.21	0.25	1.29	0.94	0.50	0.38	0.73	0.68
1974	0.51	0.30	1.43	1.07	0.67	0.51	0.89	0.84
1975	0.47	0.40	1.71	1.35	0.96	0.77	1.19	1.12
1976	0.57	0.51	1.98	1.64	1.24	1.06	1.47	1.38
1977	0.71	0.77	2.35	2.04	1.50	1.32	1.78	1.66
1978	0.79	0.90	2.56	2.23	1.70	1.48	1.98	1.85
1979	1.06	1.32	2.98	2.73	1.99	1.81	2.34	2.21
1980	1.43	1.85	3.68	3.39	2.56	2.27	2.91	2.80
1981	1.93	2.39	4.29	4.00	3.14	2.89	3.51	3.39
1982	2.23	2.97	5.17	4.82	3.87	3.48	4.32	4.15
1983	2.54	3.15	6.06	5.59	4.18	3.58	4.82	4.64
1984	2.71	3.04	6.12	5.55	4.22	3.70	4.85	4.67
1985	2.37	2.92	6.12	5.50	3.95	3.55	4.72	4.54
1986	2.02	2.52	5.83	5.08	3.23	2.43	4.13	3.96
1987	NA	2.17	5.54	4.78	2.94	2.32	4.05	2.96

NA Not available.
(1) Includes deliveries to local, state and federal agencies engaged in non-manufacturing activities.

Source: U. S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

Section VI
Table 14

SPOT PRICES FOR SELECTED WORLD CRUDE OILS
(Mid-month--Dollars per Barrel)

Crude/Type	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1984												
Brent(1)	29.30	29.33	29.85	30.05	29.90	29.28	28.38	28.43	28.48	28.30	27.95	26.95
Dubai(2)	27.75	27.60	27.85	28.03	28.08	28.05	27.50	27.18	27.35	27.33	27.20	26.53
Forcados(3)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	28.35	28.50	28.50	29.05	28.00	27.40
ANS(4)	28.35	28.50	29.68	29.53	29.30	29.38	28.48	28.70	28.70	28.13	27.95	26.33
WTI(5)	29.73	29.73	30.73	30.73	30.55	30.08	28.83	29.23	29.28	28.83	28.33	26.35
1985												
Brent	27.05	28.30	27.75	28.00	26.40	26.25	26.30	27.10	27.20	28.15	29.60	25.85
Dubai	27.45	27.25	27.13	26.75	25.53	25.45	25.53	26.25	26.08	26.80	26.85	26.55
Forcados	27.35	28.55	28.25	28.15	26.80	26.45	26.43	27.35	27.95	28.85	30.15	26.85
ANS	25.95	28.28	28.35	28.50	26.90	25.85	26.03	27.08	27.18	27.43	29.05	25.58
WTI	25.95	27.78	28.33	29.13	27.83	27.33	27.33	28.03	27.93	29.33	30.98	27.23
1986												
Brent	23.25	17.00	13.30	12.55	14.25	12.10	9.30	14.70	14.55	13.50	15.15	15.75
Dubai	23.70	14.65	11.30	10.68	11.48	10.40	7.15	12.95	14.30	13.15	14.05	14.35
Forcados	25.85	17.35	14.10	13.35	14.68	12.00	9.05	14.45	14.30	13.10	14.50	15.80
ANS	23.95	15.15	12.73	11.85	13.93	12.05	10.30	13.98	13.53	12.93	14.43	15.23
WTI	25.18	16.03	12.73	12.68	15.68	13.68	12.05	15.83	15.08	14.38	15.68	16.13
1987												
Brent	18.83	17.40	17.88	17.58	18.80	18.75	19.80	19.20	18.30	18.75	17.95	16.95
Dubai	17.40	16.77	16.87	16.98	17.00	17.25	17.60	17.25	16.90	16.95	16.45	15.10
Forcados	18.85	17.75	17.98	17.53	18.65	18.75	19.80	19.15	18.35	18.90	18.05	16.15
ANS	18.60	17.05	17.75	17.38	18.75	18.85	20.05	19.15	18.30	18.55	17.40	14.65
WTI	19.13	17.83	18.38	17.98	19.55	19.85	21.55	20.55	19.60	19.75	18.90	16.65
1988												
Brent	16.55	15.90	14.25	16.90	16.55	15.60	14.35	14.95	13.70	13.35	13.00	15.15
Dubai	15.25	15.10	12.90	15.00	15.00	13.75	12.45	13.05	11.90	11.15	10.35	12.80
Forcados	16.70	15.90	14.25	16.85	16.50	15.55	14.25	14.90	13.40	13.45	13.05	15.75
ANS	15.25	14.95	13.90	16.20	15.55	14.80	13.80	14.25	13.45	12.85	11.75	14.50
WTI	16.90	16.75	15.65	18.25	17.50	16.55	14.85	15.55	14.90	14.90	14.20	16.35
1989												
Brent	17.10	15.85	18.50									
Dubai	14.40	14.15	16.20									
Forcados	17.85	16.50	19.15									
ANS	16.95	15.95	17.75									
WTI	18.85	17.40	19.75									

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(1) Brent is from the North Sea, United Kingdom.
(2) Dubai from Dubai, part of United Arab Emirates.
(3) Forcados from Nigeria.
(4) ANS (Alaskan North Slope) from the United States.
(5) WTI (West Texas Intermediate) from the United States.

Source: Platt's Oilgram Price Report.

HISTORICAL AVERAGE U.S. GASOLINE PRICES: 1918-1946
(Cents per Gallon)

Year	Secvice Station Price (Excluding Tax)	State and Federal Taxes	Service Station Price (Including Tax)
1918	25.12	--	25.12
1919	25.41	0.06	25.47
1920	29.74	0.09	29.83
1921	26.11	0.20	26.31
1922	24.82	0.38	25.20
1923	21.06	0.91	21.97
1924	19.47	1.48	20.95
1925	20.09	2.11	22.20
1926	20.97	2.41	23.38
1927	18.28	2.81	21.09
1928	17.90	3.04	20.94
1929	17.92	3.50	21.42
1930	16.16	3.79	19.95
1931	12.98	4.00	16.98
1932	13.30	4.63	17.93
1933	12.41	5.41	17.82
1934	13.64	5.21	18.85
1935	13.55	5.29	18.84
1936	14.10	5.35	19.45
1937	14.59	5.40	19.99
1938	14.07	5.44	19.51
1939	13.31	5.44	18.75
1940	12.75	5.66	18.41
1941	13.30	5.93	19.23
1942	14.46	5.97	20.43
1943	14.56	5.97	20.53
1944	14.62	5.97	20.59
1945	14.48	6.02	20.50
1946	14.69	6.08	20.77

Source: Texaco, Inc.

SECTION VII. DEMAND

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Table 3. U.S. Supply and Demand for Total Gasoline

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Section VII
Table 1

ESTIMATED WORLD DEMAND FOR REFINED PETROLEUM PRODUCTS BY AREA
(Thousands of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist(1) Nations	Total World
1950	2,392,974	118,383	262,544	2,773,901	34,683	62,244	136,628	382,750	3,390,206	N.A.	N.A.
1951	2,578,766	133,884	298,099	3,010,749	44,053	75,137	164,829	460,604	3,755,372	N.A.	N.A.
1952	2,668,134	149,244	318,351	3,135,729	51,575	71,424	184,416	504,968	3,948,112	N.A.	N.A.
1953	2,776,778	163,237	328,243	3,268,258	57,147	75,196	204,607	550,652	4,155,858	N.A.	N.A.
1954	2,833,896	180,887	355,648	3,370,431	61,114	93,833	231,493	644,159	4,401,030	N.A.	N.A.
1955	3,089,348	200,142	353,450	3,642,940	67,243	97,860	261,296	715,283	4,784,622	N.A.	N.A.
1956	3,214,651	230,435	394,541	3,839,627	67,785	105,475	386,546	836,671	5,136,104	N.A.	N.A.
1957	3,221,949	232,667	429,009	3,883,625	75,325	116,640	331,923	841,901	5,249,414	N.A.	N.A.
1958	3,327,993	241,692	487,366	4,057,051	140,515	111,666	354,485	983,139	5,646,856	N.A.	N.A.
1959	3,477,173	295,633	553,903	4,326,709	178,303	121,883	440,003	1,203,651	6,270,549	958,548	7,229,097
1960	3,585,820	306,865	581,292	4,473,977	209,473	129,494	540,687	1,407,121	6,760,752	1,058,000	7,818,752
1961	3,641,280	315,565	633,170	4,590,015	219,092	152,970	632,167	1,625,344	7,219,588	1,205,194	8,424,782
1962	3,796,029	334,661	684,935	4,815,625	241,572	157,354	716,991	1,871,923	7,803,465	1,294,308	9,097,773
1963	3,921,364	359,651	703,155	4,984,170	253,430	175,683	857,292	2,150,829	8,421,404	1,413,898	9,835,302
1964	4,034,236	383,080	742,025	5,159,341	272,513	205,091	974,790	2,449,413	9,061,148	1,512,555	10,573,703
1965	4,202,039	416,873	766,617	5,385,529	285,132	205,891	1,114,940	2,746,529	9,738,021	1,647,203	11,385,224
1966	4,410,796	439,664	823,887	5,674,347	299,697	212,655	1,247,989	3,051,357	10,486,045	1,765,111	12,251,156
1967	4,584,526	456,663	857,000	5,898,189	318,350	219,667	1,367,445	3,262,152	11,065,803	1,927,179	12,992,982
1968	4,901,789	491,813	890,839	6,284,441	341,735	258,103	1,662,915	3,644,518	12,191,712	2,060,613	14,252,325
1969	5,159,930	508,609	943,096	6,611,635	361,131	246,304	1,987,104	4,153,039	13,359,213	2,228,375	15,587,588
1970	5,364,473	542,386	978,422	6,885,281	390,398	260,538	2,258,789	4,512,974	14,307,980	2,373,670	16,681,650
1971	5,552,560	559,038	1,047,630	7,159,228	459,608	293,014	2,451,760	4,712,845	15,076,455	3,622,268	17,698,723
1972	5,990,316	591,306	1,124,200	7,705,822	467,016	319,841	2,576,352	5,068,198	16,137,229	2,607,564	18,744,793
1973	6,317,303	622,922	1,227,749	8,167,974	561,726	345,574	2,887,617	5,289,543	17,252,434	3,173,318	20,425,752
1974	6,078,239	635,142	1,276,790	7,990,171	586,216	337,707	2,848,143	4,993,599	16,755,836	3,034,212	19,790,048

N.A. Not Available
(1) Excludes Cuba

Source: 1950-1958, U.S. Bureau of Mines, World Petroleum Statistics Annual
1959-1974, U.S. Bureau of Mines, International Petroleum Annual

Section VII
Table 1a

ESTIMATED WORLD DEMAND FOR REFINED PETROLEUM PRODUCTS BY AREA
(Thousands of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist(1) Nations	Total World
1975	5,957,515	618,363	1,294,353	7,870,231	586,502	374,996	2,679,861	4,599,943	16,111,533	3,231,831	19,343,365
1976	6,390,750	638,081	1,375,019	8,403,850	619,677	393,495	2,920,933	4,922,309	17,260,264	3,915,572	21,175,836
1977	6,727,468	639,167	1,426,596	8,793,231	679,657	404,914	3,104,274	5,035,011	18,017,087	4,225,188	22,242,275
1978	6,879,017	633,868	1,517,532	9,030,417	718,118	470,978	3,226,772	5,142,458	18,588,743	4,375,505	22,964,248
1979	6,757,077	677,805	1,606,730	9,041,612	647,510	512,460	4,146,765	5,488,505	19,836,852	3,928,130	23,764,982
1980	6,242,445	712,602	1,823,046	8,778,093	713,334	533,262	3,269,112	5,060,316	18,354,117	4,715,544	22,069,651
1981	5,861,058	642,400	1,622,425	8,125,883	649,700	556,625	3,164,550	4,677,475	17,174,233	4,867,275	22,041,508
1982	5,582,938	571,225	1,702,725	7,856,888	748,250	587,650	3,038,625	4,460,300	16,691,713	4,883,700	21,575,413
1983	5,559,364	538,375	1,624,250	7,721,989	834,025	594,950	3,036,800	4,369,050	16,556,814	4,827,125	21,383,939
1984	5,755,575	521,550	1,617,720	7,894,845	788,730	596,580	3,149,430	4,423,110	16,852,695	4,838,520	21,691,215
1985	5,740,143	543,850	1,615,125	7,899,118	784,750	620,500	3,097,025	4,343,500	16,744,893	4,865,450	21,610,343
1986	5,942,429	538,375	1,653,450	8,134,254	784,750	618,675	3,208,350	4,518,700	17,264,729	4,953,050	22,217,779
1987	6,082,742	547,500	1,695,425	8,325,667	793,875	638,750	3,312,375	4,522,350	17,593,017	5,018,750	22,611,767

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(1) Excludes Cuba.

Source: 1975-1979: U.S. Department of Energy, Energy Information Administration, International Energy Annual
1981-1987: U.S. Energy Information Administration, United States; Rest of World, BP Statistical Review of the World Oil Industry

Section VII
Table 2

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

Year	PRODUCTION Crude Oil	PRODUCTION Lease Condensate	PRODUCTION NGL's	Total Imports	Other Refinery Input(1)	Total New Supply	Unaccounted for Crude Oil(2)	Process. Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products
1947	5,087	(4)	362	437	2	5,888	+93	12	5,993	- 14	6,007	69	451	5,487
1948	5,520	(4)	401	514	1	6,436	+84	8	6,528	+293	6,235	84	368	5,783
1949	5,046	(4)	430	645	1	6,123	+42	2	6,167	- 8	6,175	42	327	5,806
1950	5,407	(4)	499	850	-	6,756	+98	2	6,856	- 56	6,912	51	305	6,556
1951	6,158	(4)	561	844	1	7,564	+49	7	7,620	+101	7,519	32	422	7,065
1952	6,256	(4)	611	952	1	7,820	+20	7	7,847	+108	7,739	17	432	7,290
1953	6,458	(4)	654	1,034	1	8,147	+ 9	20	8,176	+142	8,034	24	402	7,608
1954	6,342	(4)	691	1,052	1	8,086	+ 7	23	8,117	- 29	8,146	27	355	7,764
1955	6,807	(4)	771	1,248	1	8,827	+ 9	34	8,870	--	8,870	38	368	8,464
1956	7,151	(4)	800	1,436	1	9,388	+ 8	43	9,439	+179	9,260	47	430	8,783
1957	7,170	(4)	808	1,574	1	9,553	+18	42	9,613	+167	9,446	51	568	8,827
1958	6,710	(4)	808	1,700	1	9,218	N.A.	64	9,282	-140	9,422	29	276	9,117
1959	7,054	(4)	879	1,780	1	9,713	N.A.	86	9,799	+ 51	9,748	11	211	9,526
1960	7,035	(4)	929	1,815	1	9,780	N.A.	146	9,926	- 83	10,009	9	202	9,797
1961	7,183	(4)	991	1,917	-	10,091	N.A.	179	10,270	+111	10,159	9	174	9,976
1962	7,332	(4)	1,021	2,082	-	10,435	N.A.	175	10,610	+ 32	10,578	9	168	10,400
1963	7,542	(4)	1,098	2,123	-	10,763	N.A.	202	10,965	+ 3	10,962	10	208	10,743
1964	7,614	(4)	1,154	2,259	-	11,027	N.A.	219	11,246	+ 10	11,236	10	202	11,023
1965	7,804	(4)	1,210	2,468	-	11,482	N.A.	220	11,702	- 8	11,710	10	187	11,512
1966	8,295	(4)	1,284	2,573	-	12,152	N.A.	245	12,397	+104	12,293	10	198	12,084
1967	8,810	(4)	1,409	2,537	-	12,757	N.A.	292	13,049	+173	12,876	9	307	12,560
1968	8,660	436	1,504	2,840	9	13,448	+20	319	13,787	+152	13,635	11	231	13,393
1969	8,778	460	1,590	3,166	12	14,005	- 7	335	14,333	- 48	14,381	12	233	14,137
1970	9,180	457	1,660	3,419	17	14,733	-21	359	15,071	+103	14,968	12	259	14,697
1971	9,032	431	1,693	3,926	17	15,098	+41	382	15,521	+ 71	15,449	12	224	15,213
1972	8,998	443	1,744	4,741	28	15,954	+28	388	16,370	-232	16,602	13	222	16,367
1973	8,784	424	1,738	6,256	30	17,232	+ 3	453	17,688	+135	17,552	13	231	17,308
1974	8,375	399	1,688	6,112	36	16,610	-25	480	17,065	+179	16,886	13	221	16,653

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(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968, prior years include adjustments where available.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Separate data not available prior to 1968.
(5) Data for this year and those for subsequent years are on a 50-state basis.

Source: U.S. Bureau of Mines, Annual Petroleum Statements.

Section VII
Table 2a

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

	PRODUCTION													
Year	Crude Oil	Lease Con-densate	NGL's	Total Imports	Other Refinery Input(1)	Total New Supply	Un-accounted for Crude Oil(2)	Process. Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products
1975	8,007	367	1,633	6,056	38	16,101	+17	460	16,578	+ 32	16,545	13	209	16,322
1976	7,776	355	1,608	7,313	38	17,086	+77	479	17,646	- 58	17,698	14	223	17,461
1977	7,875	370	1,618	8,787	50	18,700	- 6	524	19,218	+529	18,689	16	243	18,431(4)
1978	8,353	355	1,567	8,202	53	18,530	-57	496	18,969	-257	19,226	30	362	18,847(4)
1979	8,181	371	1,583	8,393	44	18,572	-11	527	19,088	+107	18,981	29	471	18,516(4)
1980	8,210	386	1,573	6,865	44	17,078	+34	597	17,709	+ 94	17,615	28	544	17,056(4)
1981	8,177	395	1,626	5,996	50	15,971	+83	508	16,540	-176	16,716	63	595	16,058(4)
1982	8,262	387	1,550	4,948	53	15,200	+71	531	15,660	-327	16,173	62	815	15,296
1983	8,688	(6)	1,559	4,817	53	15,117	+114	488	15,719	-169	15,972	2	739	15,231
1984	8,879	(6)	1,630	5,240	45	15,794	+185	553	16,532	+ 85	16,447	2	722	15,726
1985	8,971	(6)	1,609	4,949	55	15,584	+145	557	16,286	-220	16,506	1	781	15,726
Jan.	8,740	(6)	1,628	4,192							16,902	1	792	16,109
Feb.	9,025	(6)	1,623	3,815							16,979	1	857	16,121
Mar.	9,095	(6)	1,600	4,625							16,068	1	694	15,373
Apr.	9,043	(6)	1,582	5,208							16,237	1	764	15,472
May	9,132	(6)	1,594	5,554							16,210	1	705	15,504
Jun.	9,022	(6)	1,597	4,774							16,176	1	692	15,483
Jul.	8,949	(6)	1,568	4,724							16,110	1	675	15,434
Aug.	8,803	(6)	1,594	4,602							16,809	0	749	16,060
Sep.	8,954	(6)	1,575	4,899							15,905	0	806	15,099
Oct.	8,970	(6)	1,610	5,101							16,634	0	690	15,944
Nov.	8,902	(6)	1,660	6,063							16,539	0	1,036	15,503
Dec.	9,030	(6)	1,680	5,757							17,537	1	925	16,611
1986	8,680	(6)	1,551	6,176	58	16,465	+139	616	17,220	+152	17,068	0	785	16,283
Jan.	9,137	(6)	1,711	5,522							16,948	1	859	16,088
Feb.	9,173	(6)	1,696	4,652							17,062	0	876	16,186
Mar.	9,013	(6)	1,604	4,653							17,008	0	732	16,276
Apr.	8,864	(6)	1,523	5,376							16,795	0	850	15,945
May	8,838	(6)	1,543	6,364							16,717	0	724	15,993
Jun.	8,623	(6)	1,504	6,784							16,691	0	642	16,049
Jul.	8,660	(6)	1,507	6,890							16,992	0	685	16,307
Aug.	8,374	(6)	1,445	7,117							17,486	0	868	16,618
Sep.	8,328	(6)	1,468	7,043							16,623	0	714	15,909
Oct.	8,419	(6)	1,477	6,390							17,433	0	831	16,602
Nov.	8,412	(6)	1,569	6,547							17,042	0	821	16,221
Dec.	8,352	(6)	1,571	6,652							17,951	0	820	17,131

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(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968, prior years include adjustments where available.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Figures do not add due to independent rounding.
(5) Excludes oil imported to the strategic petroleum reserve.
(6) Included with crude oil. Separate figure is not available.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

Year	PRODUCTION Crude Oil	PRODUCTION NGL's	Total Imports(5)	Other Refinery Input(1)	Total New Supply	Un-accounted for Crude Oil(2)	Processing Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products(4)
1987	8,349	1,595	6,605	64	16,613	145	639	17,397	-32	17,429	0	764	16,665
Jan.	8,480	1,582	6,261							17,388	1	703	16,684
Feb.	8,389	1,618	5,940							17,885	0	977	16,908
Mar.	8,464	1,598	5,699							16,886	1	720	16,165
Apr.	8,498	1,590	5,854							17,394	0	870	16,524
May	8,336	1,585	5,981							16,692	0	666	16,026
Jun.	8,279	1,578	6,705							17,499	0	669	16,830
Jul.	8,251	1,582	7,512							17,793	0	680	17,113
Aug.	8,210	1,571	7,391							17,010	0	664	16,346
Sep.	8,205	1,582	7,114							17,465	0	795	16,670
Oct.	8,364	1,602	7,011							17,587	0	646	16,941
Nov.	8,397	1,637	6,971							17,080	0	737	16,343
Dec.	8,318	1,621	6,765							18,502	0	1,057	17,445
1988	8,129	1,630	7,121	99	16,979	323	662	17,964	-23	17,989	0	819	17,170
Jan.	8,245	1,569	6,833							18,115	0	891	17,224
Feb.	8,376	1,594	6,946							18,451	0	867	17,584
Mar.	8,347	1,628	6,704							18,369	0	839	17,530
Apr.	8,268	1,609	6,972							17,118	0	678	16,440
May	8,203	1,624	7,196							16,934	0	817	16,117
Jun	8,158	1,605	6,815							17,995	0	941	17,054
Jul	8,059	1,609	6,952							17,386	0	831	16,555
Aug.	8,063	1,624	7,148							18,192	0	817	17,375
Sep.	7,900	1,622	7,136							17,491	0	675	16,816
Oct.	7,974	1,665	7,623							18,218	0	737	17,481
Nov.	7,985	1,667	7,455							18,147	0	721	17,426
Dec.	7,975	1,635	7,653							19,440	0	1,011	18,429

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(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Figures may not add due to independent rounding.
(5) Excludes oil imported into the strategic petroleum reserve.

Source: 1987--U.S. Energy Information Administration, Petroleum Supply Annual.
1988--U.S. Energy Information Administration, Petroleum Supply Monthlies.

Section VII
Table 3

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE[1]
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	2,306	1	2,307	92,303	- 1	2,308	130	2,178
1948	2,513	1	2,514	103,756	+32	2,482	102	2,380
1949	2,632	-	2,632	111,443	+21	2,611	108	2,503
1950	2,806	-	2,806	116,769	+14	2,792	68	2,724
1951	3,122	1	3,123	134,867	+28	3,095	110	1,985
1952	3,219	4	3,223	134,737	+ 1	3,222	99	3,123
1953	3,470	1	3,471	157,872	+64	3,407	104	3,303
1954	3,456	-	3,456	155,400	- 7	3,463	94	3,369
1955	3,764	1	3,765	165,433	+27	3,738	95	3,643
1956	3,904	4	3,908	187,271	+59	3,849	97	3,752
1957	3,940	8	3,948	196,776	+26	3,922	106	3,816
1958	3,944	38	3,982	186,760	-27	4,009	75	3,934
1959(2)	4,079	36	4,115	187,613	-	4,115	46	4,069
1960	4,160	27	4,187	194,774	+20	4,167	37	4,130
1961	4,199	29	4,228	195,830	+ 3	4,225	25	4,200
1962	4,338	38	4,376	190,138	+16	4,360	18	4,342
1963	4,452	44	4,496	190,937	+ 6	4,490	19	4,471
1964	4,539	29	4,568	193,633	+21	4,547	17	4,530
1965	4,670	27	4,697	183,058	-29	4,726	13	4,713
1966	4,911	43	4,954	194,177	+30	4,924	11	4,913
1967	5,057	42	5,099	207,980	+37	5,062	14	5,048
1968	5,301	59	5,360	211,526	+10	5,350	6	5,344
1969	5,557	62	5,619	217,392	+16	5,603	7	5,596

(2) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 3a

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31(5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(6)
1970	5,768	67	5,835	214,348	- 8	5,843	4	5,839
1971	6,034	59	6,093	223,771	+25	6,068	5	6,063
1972	6,339	68	6,407	217,149	-18	6,425	2	6,423
1973	6,580	132	6,712	213,417	-11	6,723	5	6,718
1974	6,404	204	6,608	221,881(3)	+23	6,585	3	6,582
1975	6,558	184	6,742	238,002	+27	6,715	2	6,713
1976	6,877	131	7,008	234,272	-10	7,018	4	7,014
1977	6,982	218	7,200	257,623	+64	7,136	2	7,134
1978	7,117	190	7,307	241,002	-54	7,361	2	7,358
1979	6,889	181	7,070	239,919	- 3	7,073	--	7,073
1980	6,541	140	6,681	264,205	+66	6,615	--	6,615
1981	6,437	157	6,594	256,425(4)	-27	6,621	2	6,619
1982	6,362	197	6,559	246,935	-26	6,584	20	6,564
1983	6,365	248	6,613	225,042	-45	6,658	10	6,648
1984	6,478	299	6,777	246,307	+54	6,723	6	6,717
1985	6,441	381	6,822	225,148	-43	6,865	10	6,858
Jan.	5,943	204	6,147	236,571	+224	6,372	2	6,370
Feb.	5,937	348	6,285	227,837	+325	6,610	2	6,607
Mar.	6,096	481	6,577	221,706	+117	6,694	3	6,690
Apr.	6,369	494	6,863	217,664	+135	6,998	11	6,987
May	6,589	480	7,069	217,395	+27	7,096	8	7,088
Jun.	6,807	396	7,203	220,825	-171	7,032	7	7,025
Jul.	6,825	426	7,251	228,977	-190	7,061	18	7,043
Aug.	6,849	305	7,154	224,116	+128	7,282	4	7,277
Sep.	6,328	314	6,642	225,565	+23	6,665	6	6,658
Oct.	6,380	324	6,704	216,183	+238	6,942	19	6,924
Nov.	6,505	410	6,915	219,506	-100	6,805	17	6,790
Dec.	6,669	386	7,055	225,148	-219	6,836	18	6,818

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* Includes motor and aviation gasoline.

(3) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 228,262 thousand barrels.

(4) U.S. Department of Energy altered its stock reporting base as of January 1981. On the new basis, year-end 1980 stocks were 265,802 thousand barrels. This figure was used to compute the 1981 stock change.

(5) Includes blending components.

(6) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, P.A.D. District Supply/Disposition Annual.
1981-1985--U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 3b

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end(5) (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(6)
1986	6,784	326	7,110	235,490	+ 11	7,099	33	7,066
Jan.	6,542	332	6,874	240,680	+347	6,527	6	6,522
Feb.	6,333	334	6,667	246,139	+167	6,500	11	6,489
Mar.	6,082	224	6,306	221,219	-697	7,003	21	6,983
Apr.	6,528	291	6,819	209,801	-341	7,160	23	7,138
May	7,126	471	7,597	222,753	+447	7,150	9	7,141
Jun.	7,137	392	7,529	232,754	+267	7,262	18	7,244
Jul.	6,994	337	7,331	226,374	-187	7,518	47	7,472
Aug.	7,136	303	7,439	224,160	- 76	7,515	43	7,473
Sep.	6,956	304	7,260	236,700	+293	6,967	40	6,926
Oct.	6,646	322	6,968	225,153	-370	7,338	61	7,278
Nov.	6,917	280	7,197	232,201	+198	6,999	96	6,902
Dec.	6,982	320	7,302	235,490	+112	7,190	24	7,166
1987	6,866	384	7,250	228,770	- 15	7,266	35	7,231
Jan.	6,738	394	7,132	253,723	+533	6,598	44	6,554
Feb.	6,387	310	6,697	252,768	-143	6,840	22	6,818
Mar.	6,588	364	6,952	250,466	- 57	7,010	20	6,990
Apr.	6,867	374	7,241	245,932	-142	7,383	42	7,341
May	7,016	354	7,370	236,983	-169	7,538	48	7,490
Jun.	7,124	385	7,509	232,608	-105	7,614	46	7,568
Jul.	7,070	453	7,523	228,572	-119	7,643	33	7,610
Aug.	6,962	396	7,358	228,707	-29	7,387	19	7,368
Sep.	6,954	421	7,375	232,075	+115	7,260	30	7,230
Oct.	6,694	356	7,050	220,517	-301	7,351	21	7,330
Nov.	6,923	484	7,407	227,624	+206	7,201	32	7,169
Dec.	7,036	320	7,356	228,770	+ 29	7,326	59	7,267
1988	6,979	385	7,364	230,599	+ 1	7,362	22	7,340
Jan.	6,744	324	7,068	241,971	+358	6,710	8	6,702
Feb.	6,752	365	7,117	242,996	+ 72	7,044	18	7,026
Mar.	6,715	318	7,033	233,423	-274	7,307	18	7,290
Apr.	6,929	349	7,278	228,139	-149	7,426	18	7,408
May	6,877	418	7,295	227,775	- 34	7,330	28	7,302
Jun.	7,009	425	7,434	210,995	-495	7,929	59	7,890
Jul.	7,191	461	7,652	215,872	+134	7,518	12	7,506
Aug.	7,235	465	7,700	220,621	+146	7,554	15	7,539
Sep.	6,976	404	7,380	222,689	- 14	7,393	16	7,377
Oct.	6,902	363	7,265	219,533	+ 62	7,325	13	7,312
Nov.	7,076	451	7,527	223,361	-123	7,415	15	7,390
Dec.	7,328	278	7,606	230,599	+ 6	7,410	45	7,365

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* Includes motor gasoline and aviation gasoline.
(5) Includes blending components.
(6) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR MOTOR GASOLINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31(5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1964(1)	4,399	29	4,428	185,766	+23	4,405	2	4,403
1965	4,537	27	4,564	174,717	-30	4,594	1	4,593
1966	4,798	43	4,841	186,393	+31	4,810	2	4,808
1967	4,956	42	4,998	200,055	+ 7	4,961	3	4,958
1968	5,215	59	5,274	204,496	+13	5,261	1	5,260
1969	5,484	62	5,546	211,199	+18	5,528	2	5,526
1970	5,714	67	5,781	209,255	- 5	5,786	1	5,785
1971	5,984	59	6,043	219,352	+28	6,015	1	6,014
1972	6,292	68	6,360	212,894	-18	6,378	1	6,377
1973	6,535	134	6,669	209,478	-10	6,679	4	6,675
1974	6,360	204	6,564	218,410(2)	+24	6,540	2	6,538
1975	6,520	184	6,704	234,978	+28	6,676	2	6,674
1976	6,841	130	6,971	231,387	-10	6,981	3	6,978
1977	7,033	217	7,250	257,623	+73	7,177	2	7,175
1978(4)	7,169	190	7,359	237,979	-54	7,413	1	7,412
1979(4)	7,120	181	7,301	237,200	- 1	7,302	0(3)	7,302
1980(4)	6,814	140	6,954	261,398	+66	6,888	1	6,887
1981	6,405	157	6,562	253,001	-28	6,590	2	6,588
1982	6,338	197	6,535	243,876	-25	6,560	20	6,539
1983	6,340	247	6,587	222,434	-45	6,632	10	6,622
1984	6,453	299	6,752	243,296	+54	6,698	6	6,693
1985	6,419	381	6,800	222,839	-41	6,841	10	6,831
Jan.	5,926	204	6,130	233,663	-220	6,350	2	6,348
Feb.	5,914	348	6,262	224,884	-327	6,589	2	6,587
Mar.	6,072	481	6,553	218,816	-115	6,668	3	6,664
Apr.	6,344	494	8,838	214,979	-128	6,966	11	6,956
May	6,564	480	7,044	214,875	-23	7,067	8	7,060
Jun.	6,780	396	7,176	218,344	+172	7,004	7	6,997
Jul.	6,788	426	7,214	226,471	+188	7,026	18	7,008
Aug.	6,814	305	7,119	221,583	-127	7,246	4	7,242
Sep.	6,299	314	6,613	223,098	+22	6,635	6	6,629
Oct.	6,356	324	6,680	213,853	-235	6,915	19	6,897
Nov.	6,480	410	6,890	217,013	+104	6,786	17	6,770
Dec.	6,651	386	7,037	222,839	+227	6,810	18	6,792

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(1) Data prior to 1964 is not available on a comparable basis.

(2) U.S. Bureau of Mines altered its stock reporting as of January 1975. On the new basis, year-end 1974 stocks were 224,719 thousand barrels. This figure was used to compute the 1975 stock change.

(3) Totals do not add due to independent rounding.

(4) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate, and residual product supplies. Based on this new methodology, API has reconstructed DOE data for 1978, 1979, and 1980. The stock reporting base was also altered as of January 1981. On the new basis, year-end 1980 stocks were 263,003 thousand barrels. This figure was used to compute the 1981 stock change.

(5) Includes motor gasoline blending components.

Source: U.S. Bureau of Mines, Annual Petroleum Statements.
U.S. Department of Energy, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR MOTOR GASOLINE
(Daily Averages in Thousand of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1986	6,752	326	7,078	233,057	+ 11	7,067	33	7,034
Jan.	6,522	332	6,854	238,330	+347	6,507	6	6,502
Feb.	6,301	334	6,635	243,530	+156	6,479	11	6,469
Mar.	6,060	224	6,284	218,756	-691	6,975	21	6,955
Apr.	6,498	291	6,789	207,454	-338	7,127	23	7,105
May	7,094	471	7,565	220,502	+450	7,115	9	7,106
Jun.	7,100	392	7,492	230,480	+265	7,227	18	7,209
Jul.	6,956	337	7,293	224,028	-189	7,482	47	7,436
Aug.	7,091	303	7,394	221,586	- 83	7,477	43	7,435
Sep.	6,890	303	7,193	233,945	+289	6,904	40	6,864
Oct.	6,616	322	6,938	222,356	-372	7,312	61	7,250
Nov.	6,855	280	7,175	229,370	+200	6,975	96	6,879
Dec.	6,969	320	7,289	233,057	+122	7,167	24	7,143
1987	6,841	384	7,225	226,183	- 15	7,241	35	7,206
Jan.	6,714	393	7,107	251,111	+528	6,579	44	6,535
Feb.	6,365	309	6,674	250,082	-144	6,818	22	6,796
Mar.	6,568	364	6,932	248,050	- 51	6,984	20	6,964
Apr.	6,849	374	7,223	241,750	-133	7,356	42	7,314
May	6,991	354	7,345	234,908	-164	7,508	48	7,460
Jun.	7,089	385	7,474	230,421	-111	7,585	46	7,539
Jul.	7,042	452	7,494	226,353	-119	7,614	33	7,581
Aug.	6,932	396	7,328	226,459	- 29	7,357	19	7,338
Sep.	6,921	421	7,342	229,648	+107	7,235	30	7,205
Oct.	6,668	356	7,024	218,022	-302	7,326	21	7,305
Nov.	6,907	484	7,391	225,190	+208	7,183	32	7,151
Dec.	7,014	320	7,334	226,183	+ 24	7,310	59	7,251
1988	6,954	384	7,338	228,231	+ 2	7,336	22	7,314
Jan.	6,723	324	7,047	239,464	+361	6,687	8	6,679
Feb.	6,736	365	7,101	240,661	+ 78	7,022	18	7,004
Mar.	6,694	318	7,012	231,258	-271	7,283	18	7,265
Apr.	6,906	349	7,255	225,956	-148	7,402	18	7,384
May	6,847	415	7,262	225,644	- 34	7,297	28	7,269
Jun.	6,982	424	7,406	208,969	-490	7,897	59	7,838
Jul.	7,159	461	7,620	213,757	+135	7,485	12	7,473
Aug.	7,203	465	7,668	218,602	+142	7,526	15	7,511
Sep.	6,948	403	7,351	220,594	- 14	7,365	16	7,349
Oct.	6,875	363	7,238	217,313	- 63	7,300	13	7,287
Nov.	7,056	451	7,507	221,094	+124	7,384	15	7,369
Dec.	7,303	277	7,580	228,231	+192	7,389	45	7,344

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(3) Total may not add due to independent rounding.
(5) Includes motor gasoline blending components.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals and Petroleum Supply Monthlies.

Section VII
Table 5

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	864	12	876	51,081	- 23	899	82	817
1948	1,046	7	1,053	71,429	+ 64	989	58	931
1949	941	5	946	75,207	+ 10	936	34	902
1950	1,100	7	1,107	71,948	- 10	1,117	35	1,082
1951	1,311	5	1,316	86,619	+ 29	1,287	62	1,225
1952	1,422	8	1,430	99,375	+ 35	1,395	92	1,303
1953	1,452	9	1,461	111,741	+ 35	1,426	89	1,337
1954	1,490	9	1,499	108,144	- 9	1,508	66	1,442
1955	1,656	12	1,668	111,333	+ 9	1,659	67	1,592
1956	1,825	14	1,839	133,981	+ 62	1,777	94	1,683
1957	1,838	23	1,861	149,449	+ 42	1,819	131	1,688
1958	1,734	41	1,775	125,101	- 67	1,842	52	1,790
1959(1)	1,865	48	1,913	151,164	+ 70	1,843	35	1,808
1960	1,830	35	1,865	138,455	- 34	1,899	27	1,872
1961	1,911	47	1,958	152,018	+ 37	1,921	19	1,902
1962	1,975	33	2,008	144,505	- 21	2,029	22	2,007
1963	2,098	25	2,123	156,677	+ 35	2,088	41	2,047
1964	2,031	32	2,063	155,846	- 2	2,065	15	2,050
1965	2,099	36	2,135	155,407	- 1	2,136	10	2,126
1966	2,155	38	2,193	154,096	- 4	2,197	12	2,185
1967(2)	2,207	51	2,258	159,703	+ 5	2,253	12	2,241
1968	2,299	131	2,430	173,158	+ 37	2,393	4	2,389
1969	2,326	139	2,465	171,714	- 4	2,469	3	2,466
1970	2,460	148	2,608	195,271	+ 65	2,543	3	2,540
1971	2,503	153	2,656	190,622	- 13	2,669	8	2,661
1972	2,636	181	2,817	154,319	- 99	2,916	3	2,913
1973	2,824	392	3,216	196,461	+115	3,101	9	3,092
1974	2,671	289	2,960	200,068(3)	+ 10	2,950	2	2,948

(1) These figures and those for subsequent years are on a 50-state basis.
(2) Production and stocks at gas processing plants are included in this and subsequent years.
(3) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 223,717 thousand barrels. This figure was used to compute the 1975 stock change (Table 5a).

SOURCE: U.S. Bureau of Mines, Annual Petroleum Statements

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels per Day)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (2)
1975	2,656	155	2,811	208,833	- 41	2,852	1	2,851
1976	2,925	146	3,072	185,986	- 62	3,134	1	3,133
1977	3,281	250	3,531	250,295	+178	3,353	1	3,352
1978(1)	3,171	173	3,344	216,463	- 93	3,437	3	3,435
1979(1)	3,167	197	3,364	228,729	+ 34	3,330	3	3,327
1980(1)	2,769	139	2,908	205,132	- 64	2,972	3	2,969
1981	2,623	173	2,796	191,541	- 38	2,834	5	2,829
1982	2,616	93	2,709	178,592	- 35	2,744	74	2,671
1983(3)	2,456	174	2,630	140,263	-124	2,754	64	2,690
1984	2,681	272	2,953	161,072	+ 57	2,896	51	2,845
1985	2,688	200	2,888	143,673	-48	2,936	67	2,868
Jan.	2,631	272	2,903	142,384	-603	3,506	41	3,465
Feb.	2,503	143	2,646	121,439	-748	3,394	64	3,330
Mar.	2,267	156	2,423	99,293	-714	3,137	44	3,093
Apr.	2,490	253	2,743	96,845	-82	2,825	27	2,798
May	2,686	197	2,883	104,432	+245	2,638	31	2,607
Jun.	2,647	152	2,799	109,688	+175	2,624	30	2,594
Jul.	2,646	95	2,741	115,683	+193	2,547	112	2,436
Aug.	2,592	81	2,673	113,755	-62	2,735	100	2,636
Sep.	2,594	222	2,816	117,367	+120	2,696	121	2,575
Oct.	2,902	262	3,164	123,417	+195	2,969	67	2,901
Nov.	3,103	280	3,383	139,719	+543	2,840	92	2,747
Dec.	3,175	287	3,462	143,673	+128	3,334	81	3,253
1986	2,797	347	3,044	155,097	+31	3,013	100	2,914
Jan.	2,899	325	3,224	136,490	-232	3,456	126	3,330
Feb.	2,563	169	2,732	112,402	-860	3,592	176	3,416
Mar.	2,643	217	2,860	98,811	-438	3,298	131	3,168
Apr.	2,787	147	2,934	95,907	-97	3,031	128	2,904
May	2,858	149	3,007	98,857	+95	2,912	149	2,762
Jun.	2,729	169	2,898	107,895	+301	2,597	53	2,544
Jul.	2,710	313	3,023	118,905	+355	2,668	75	2,593
Aug.	2,922	370	3,292	137,737	+607	2,685	64	2,621
Sep.	2,865	262	3,127	152,403	+489	2,638	98	2,540
Oct.	2,717	243	2,960	151,617	-25	2,985	74	2,912
Nov.	2,916	254	3,170	158,263	+222	2,948	72	2,876
Dec.	2,943	339	3,282	155,097	-102	3,384	55	3,329

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(1) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate, and residual product supplied. Based on this new methodology, API has reconstructed DOE data for 1978, 1979, and 1980.

(2) Totals may not add due to independent rounding.

(3) In 1983, DOE changed their methodology for calculating stocks. The 1983 stock change is based on DOE's revised stock figures for 1982.

- Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1987	2,730	255	2,985	134,485	- 56	3,042	66	2,976
Jan.	2,760	222	2,982	141,342	-444	3,426	115	3,310
Feb.	2,556	253	2,809	123,730	-629	3,438	93	3,345
Mar.	2,422	297	2,719	109,332	-464	3,183	67	3,116
Apr.	2,552	192	2,744	100,338	-300	3,044	53	2,991
May	2,563	203	2,766	101,286	+31	2,735	51	2,684
Jun.	2,689	265	2,954	104,391	+104	2,850	61	2,790
Jul.	2,700	381	3,081	114,602	+329	2,752	38	2,713
Aug.	2,705	222	2,927	124,735	+327	2,600	47	2,553
Sep.	2,748	222	2,970	126,762	+68	2,902	64	2,838
Oct.	2,780	237	3,017	120,974	-187	3,204	53	3,151
Nov.	3,036	187	3,223	128,004	+234	2,989	56	2,932
Dec.	3,241	378	3,619	134,485	+209	3,410	92	3,318
1988	2,860	282	3,142	123,469	- 30	3,173	69	3,104
Jan.	3,007	355	3,362	127,155	-236	3,599	82	3,517
Feb.	2,683	330	3,013	109,640	-604	3,618	107	3,511
Mar.	2,720	243	2,963	89,312	-656	3,619	74	3,544
Apr.	2,870	208	3,078	94,290	+166	2,912	42	2,870
May	2,930	228	3,158	104,452	+328	2,831	74	2,757
Jun.	2,893	209	3,102	110,662	+207	2,895	76	2,820
Jul.	2,782	205	2,987	119,434	+283	2,705	58	2,647
Aug.	2,844	270	3,114	125,185	+186	2,930	70	2,860
Sep.	2,779	292	3,071	130,976	+193	2,878	72	2,806
Oct.	2,829	324	3,153	127,949	- 98	3,252	48	3,204
Nov.	2,905	308	3,213	128,724	+ 26	3,187	34	3,153
Dec.	3,068	409	3,477	123,469	-170	3,647	87	3,560

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 6

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	1,301	149	1,450	47,091	--	1,450	29	1,421
1948	1,329	146	1,475	64,021	+72	1,403	36	1,367
1949	1,177	206	1,383	60,193	-11	1,394	35	1,359
1950	1,180	329	1,509	40,750	-53	1,562	45	1,517
1951	1,302	327	1,629	42,853	+ 3	1,626	80	1,546
1952	1,257	351	1,608	48,706	+16	1,592	76	1,516
1953	1,248	360	1,608	49,370	+ 2	1,606	71	1,535
1954	1,158	354	1,512	52,105	+ 8	1,504	73	1,431
1955	1,166	417	1,583	39,174	-36	1,619	93	1,526
1956	1,183	445	1,628	44,491	+15	1,613	76	1,537
1957	1,176	475	1,651	59,959	+42	1,609	105	1,504
1958	1,025	499	1,524	59,508	- 1	1,525	70	1,455
1959(1)	973	610	1,583	53,501	-18	1,601	57	1,544
1960	918	637	1,555	44,870	-24	1,579	51	1,528
1961	875	667	1,542	44,869	--	1,542	39	1,503
1962	820	724	1,544	49,996	+14	1,530	35	1,495
1963	765	747	1,512	47,538	- 6	1,518	42	1,476
1964	739	808	1,547	40,403	-20	1,567	52	1,515
1965	746	946	1,692	56,214	+43	1,649	41	1,608
1966	733	1,032	1,765	61,196	+14	1,751	35	1,716
1967	766	1,085	1,851	65,597	+ 5	1,846	60	1,786
1968	765	1,120	1,885	67,359	+ 5	1,880	54	1,826
1969	740	1,265	2,005	58,395	-19	2,024	46	1,978
1970	718	1,528	2,246	53,994	-12	2,258	54	2,204
1971	765	1,583	2,348	59,681	+16	2,332	36	2,296
1972	808	1,742	2,550	55,216	-12	2,562	33	2,529
1973	988	1,853	2,841	53,480	- 5	2,846	23	2,823
1974	1,083	1,587	2,670	59,694(2)	+17	2,653	14	2,639

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(1) These figures and those for subsequent years are on a 50 state basis.
(2) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 74,939 thousand barrels. This figure was used to compute the 1975 stock change (Table 7a)

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1975	1,251	1,223	2,474	74,126	- 2	2,476	15	2,461
1976	1,393	1,413	2,806	72,344	- 5	2,811	12	2,799
1977	1,767	1,359	3,126	89,993	+49	3,077	6	3,071
1978(1)	1,681	1,355	3,036	90,194	+ 1	3,037	13	3,024
1979(1)	1,708	1,151	2,859	95,598	+15	2,844	9	2,835
1980(1)	1,660	920	2,580	90,344	-14	2,594	33	2,561
1981	1,369	800	2,169	77,992	-37	2,206	118	2,088
1982	1,118	776	1,894	66,200	-32	1,926	209	1,716
1983(2)	852	699	1,551	48,504	-55	1,606	185	1,421
1984	891	681	1,572	53,000	+12	1,560	190	1,369
1985	882	510	1,392	50,381	-7	1,399	197	1,202
Jan.	1,004	568	1,572	46,201	-219	1,791	312	1,480
Feb.	1,040	580	1,620	45,053	-41	1,661	295	1,366
Mar.	963	477	1,440	46,127	+35	1,405	216	1,190
Apr.	912	383	1,295	46,195	+2	1,293	167	1,126
May	793	394	1,187	41,397	-155	1,342	185	1,156
Jun.	702	400	1,102	39,622	-59	1,161	118	1,043
Jul.	732	437	1,169	40,507	+29	1,140	83	1,058
Aug.	742	424	1,166	37,164	-108	1,274	106	1,168
Sep.	808	617	1,425	43,359	+207	1,218	188	1,031
Oct.	912	541	1,453	50,418	+228	1,225	184	1,041
Nov.	932	627	1,559	50,263	-5	1,564	275	1,290
Dec.	1,055	681	1,736	50,381	+4	1,732	250	1,483
1986	889	669	1,558	47,437	-8	1,566	147	1,418
Jan.	940	622	1,562	48,655	-56	1,618	211	1,407
Feb.	856	604	1,460	43,048	-200	1,660	183	1,478
Mar.	813	626	1,439	39,709	-108	1,547	113	1,435
Apr.	933	545	1,478	35,910	-127	1,605	202	1,402
May	913	675	1,588	39,431	+114	1,474	129	1,345
Jun.	818	712	1,530	42,767	+111	1,419	43	1,377
Jul.	850	673	1,523	40,333	-75	1,598	90	1,508
Aug.	896	793	1,689	41,346	-29	1,660	174	1,485
Sep.	854	641	1,495	44,006	+89	1,406	110	1,296
Oct.	827	635	1,462	45,822	+59	1,403	144	1,259
Nov.	975	574	1,549	46,275	+15	1,534	143	1,391
Dec.	987	913	1,900	47,437	+37	1,863	224	1,638

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(1) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate and residual product supplied. Based on this new methodology, API has reconstructed DOE data for 1978, 1979, and 1980.
(2) In 1983, the Department of Energy changed their methodology for calculating stocks. The 1983 stock change is based on DOE's revised figure for 1982.
(3) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1987	885	565	1,450	47,410	--	1,450	186	1,264
Jan.	920	701	1,621	44,931	-81	1,702	198	1,504
Feb.	825	668	1,493	38,140	-243	1,736	221	1,515
Mar.	863	559	1,422	39,303	+38	1,384	150	1,234
Apr.	831	476	1,307	35,890	-114	1,421	239	1,182
May	813	505	1,318	40,371	+145	1,173	144	1,029
Jun.	864	481	1,345	41,356	+33	1,312	105	1,207
Jul.	901	721	1,622	44,694	+108	1,514	175	1,339
Aug.	882	512	1,394	45,690	+32	1,362	185	1,176
Sep.	904	526	1,430	44,417	-42	1,472	177	1,296
Oct.	887	414	1,301	45,619	+39	1,262	194	1,069
Nov.	928	568	1,496	49,975	+145	1,351	146	1,205
Dec.	1,001	650	1,651	47,410	-83	1,734	300	1,434
1988	928	593	1,521	44,548	- 8	1,529	200	1,329
Jan.	1,009	737	1,746	46,628	-23	1,768	190	1,578
Feb.	997	792	1,789	45,465	-40	1,830	229	1,601
Mar.	944	610	1,554	44,057	-45	1,599	165	1,434
Apr.	951	465	1,416	43,245	-27	1,442	170	1,272
May	866	423	1,289	45,746	+81	1,208	263	945
Jun.	881	349	1,230	42,123	-121	1,351	249	1,102
Jul.	913	436	1,349	41,072	-34	1,383	206	1,177
Aug.	863	515	1,378	37,840	-104	1,483	225	1,258
Sep.	859	566	1,425	44,220	+213	1,212	100	1,112
Oct.	863	522	1,385	42,405	- 59	1,444	181	1,263
Nov.	923	765	1,688	45,089	+ 89	1,599	146	1,453
Dec.	1,067	942	2,009	44,548	- 17	2,027	271	1,756

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

DELIVERIES OF DISTILLATE AND RESIDUAL FUEL OIL TO ELECTRIC UTILITIES
(Thousands of Barrels per Day)

Year	Distillate	Residual	Total	Total Fuel Oil Demand, All Sectors
1947	39	167	206	2,238
1948	41	155	196	2,298
1949	34	219	253	2,261
1950	36	255	291	2,599
1951	26	193	219	2,771
1952	23	192	215	2,819
1953	19	234	253	2,872
1954	17	194	211	2,873
1955	16	208	224	3,118
1956	15	202	217	3,220
1957	15	210	225	3,192
1958	15	211	226	3,245
1959(1)	14	225	239	3,352
1960(2)	13	233	246	3,400
1961	11	241	252	3,405
1962	11	242	253	3,502
1963	11	251	262	3,523
1964	10	267	277	3,565
1965	10	315	235	3,734
1966	10	378	388	3,901
1967	8	434	442(3)	4,027
1968	23(4)	505	528	3,215
1969	33	679	712	4,444
1970	68	856	924	4,744
1971	97	1,019	1,116	4,957
1972	187(5)	1,189	1,376	5,442
1973	214(5)	1,396	1,610	5,915
1974	232(5)	1,302	1,534	5,587
1975	174(5)	1,246	1,420	5,312
1976	165(5)	1,351	1,510	5,961
1977	210(5)	1,560	1,770	6,441
1978	211(5)	1,461	1,672	6,467
1979	128	1,333	1,461	6,162

(1) These data include Alaska but not Hawaii.
(2) These data and those for subsequent years are on a 50-state basis.
(3) Electric public utility power plants only.
(4) These data and those for subsequent years include distillate sales for gas turbine plants.
(5) Includes kerosine jet fuel; 1972--24,000 bbls. per day; 1973--17,000 bbls. per day; 1974--14,000 bbls. per day; 1975--9,000 bbls. per day; 1976--11,600 bbls. per day; 1977--17,419 bbls. per day; 1978--12,342 bbls. per day.

Source: Energy Information Administration, Sales of Fuel Oil and Kerosine, Annuals
1979 -- Energy Information Administration, Petroleum Supply Annual.

DELIVERIES OF DISTILLATE AND RESIDUAL FUEL OIL TO ELECTRIC UTILITIES
(Thousands of Barrels per Day)

Year	Distillate	Residual	Total	Total Fuel Oil Demand, All Sectors
1980	87	1,066	1,153	5,531
1981	50	892	942	4,916
1982	33	623	656	4,387
1983	32	560	592	4,111
1984	45	509	554	4,214
1985	34	403	437	4,070
1986	40	590	630	4,333
1987	42	498	540	4,241

Source: 1980-1983: U.S. Energy Information Administration, Petroleum Supply Annuals
1984-1987: U.S. Energy Information Administration, Petroleum Marketing Monthly

Section VII
Table 8

MOTOR GASOLINE CONSUMPTION IN THE UNITED STATES
(Thousands of Gallons)

STATE	1962(1)	1963	1964	1965	1966	1967	1968	1969	1970
AL	1,067,093	1,108,056	1,173,601	1,225,510	1,289,379	1,336,173	1,418,671	1,497,778	1,576,614
AK	49,644	51,577	56,075	63,788	64,478	68,157	77,905	86,603	90,489
AZ	558,562	586,726	617,131	634,772	672,134	695,160	753,141	867,887	933,764
AR	665,031	696,979	729,755	760,282	790,413	822,045	870,295	919,093	957,861
CA	6,174,317	6,525,421	6,914,444	7,180,701	7,534,489	7,776,952	8,246,668	8,659,571	9,058,684
CO	734,160	757,265	788,491	816,177	849,421	884,608	957,039	1,020,840	1,109,271
CT	842,550	879,170	922,774	962,330	1,005,351	1,038,161	1,103,268	1,155,227	1,213,358
DE	195,355	205,954	206,598	215,135	224,394	227,476	237,703	250,885	266,966
DC	210,702	201,356	212,799	220,886	224,211	221,691	225,427	229,067	229,850
FL	1,915,904	2,006,222	2,126,210	2,243,581	2,385,233	2,515,867	2,748,550	2,994,281	3,232,450
GA	1,404,674	1,465,671	1,563,737	1,655,099	1,744,907	1,840,233	1,996,264	2,161,759	2,295,682
HI	151,197	152,457	160,106	169,841	177,491	181,998	200,126	213,780	221,973
ID	294,826	297,597	308,333	321,015	329,895	343,979	363,990	379,479	400,735
IL	3,277,932	3,382,046	3,506,222	3,638,663	3,819,091	3,879,185	4,160,075	4,312,652	4,408,829
IN	1,840,861	1,890,093	1,956,911	2,037,715	2,125,426	2,169,585	2,311,357	2,410,523	2,508,880
IA	1,206,366	1,243,196	1,264,294	1,295,595	1,372,526	1,422,541	1,458,129	1,499,697	1,516,878
KS	1,023,636	1,039,657	1,052,216	1,075,559	1,098,771	1,128,343	1,261,616	1,340,894	1,345,014
KY	957,804	996,318	1,041,346	1,092,893	1,145,238	1,216,404	1,288,696	1,362,736	1,438,058
LA	977,677	1,012,696	1,083,154	1,154,384	1,226,382	1,279,173	1,360,715	1,420,327	1,482,761
ME	346,745	354,350	368,636	382,716	394,953	405,061	426,000	442,582	465,138
MD	987,408	1,047,240	1,098,212	1,143,315	1,220,169	1,277,344	1,366,279	1,466,184	1,569,266
MA	1,490,870	1,533,611	1,592,022	1,651,647	1,712,057	1,766,218	1,873,028	1,954,415	2,078,906
MI	2,792,967	2,930,105	3,018,362	3,183,006	3,342,442	3,415,709	3,648,173	3,839,650	4,013,072
MN	1,372,457	1,415,974	1,451,934	1,495,423	1,572,099	1,610,761	1,707,502	1,798,954	1,879,177
MS	707,872	738,301	767,988	794,987	847,672	886,319	937,310	1,000,175	1,046,335
MO	1,722,913	1,773,359	1,838,699	1,893,743	1,983,408	2,036,025	2,147,273	2,270,371	2,373,032
MT	309,869	309,609	313,450	327,979	334,344	342,289	361,060	371,950	395,762
NE	633,965	655,102	676,866	690,018	718,456	733,607	762,982	799,783	814,936
NV	184,637	205,360	218,989	233,702	242,024	257,239	264,295	285,519	314,702
NH	212,076	221,306	233,389	244,485	262,392	275,998	300,730	322,299	346,298
NJ	2,045,680	2,148,500	2,222,915	2,322,560	2,391,674	2,447,834	2,594,999	2,676,054	2,802,641
NM	407,899	426,085	441,606	453,980	467,035	474,859	497,657	531,471	556,157
NY	4,068,568	4,198,606	4,405,589	4,549,269	4,730,616	4,865,488	5,027,115	5,454,249	5,506,910
NC	1,565,360	1,645,046	1,745,346	1,809,559	1,912,416	2,015,089	2,122,010	2,266,828	2,378,383
ND	321,951	331,251	342,523	347,480	346,264	345,032	357,520	374,952	380,364
OH	3,305,508	3,359,222	3,523,939	3,657,408	3,830,041	3,934,925	4,168,373	4,383,205	4,574,876
OK	983,966	1,008,420	1,049,671	1,077,090	1,135,940	1,171,121	1,235,953	1,300,609	1,372,638
OR	721,548	748,510	793,407	835,390	872,869	900,083	943,803	995,103	1,056,737
PA	3,300,176	3,369,210	3,492,876	3,599,184	3,695,541	3,849,853	4,030,622	4,170,261	4,347,667
RI	251,973	260,575	266,247	274,284	284,659	291,723	309,467	319,424	377,754
SC	773,812	805,150	839,056	888,535	944,289	988,231	1,074,726	1,136,709	1,209,516
SD	369,744	374,564	372,471	378,889	386,384	391,196	406,324	410,698	420,859
TN	1,200,616	1,245,849	1,324,458	1,370,742	1,463,854	1,545,576	1,609,233	1,721,094	1,792,235
TX	3,974,184	4,150,126	4,358,915	4,525,707	4,743,477	4,923,595	5,328,563	5,670,785	6,004,582
UT	344,939	358,369	369,398	382,693	402,191	414,702	450,967	478,390	511,959
VT	139,741	144,851	149,730	158,593	168,816	180,781	190,219	199,412	213,786
VA	1,332,670	1,345,478	1,410,858	1,479,876	1,544,631	1,599,174	1,693,865	1,790,109	1,900,620
WA	1,040,286	1,048,248	1,090,828	1,142,082	1,232,598	1,313,146	1,404,704	1,477,305	1,534,060
WV	494,792	507,715	520,633	540,240	569,235	590,460	630,982	652,414	691,539
WI	1,391,608	1,430,350	1,486,187	1,541,094	1,605,982	1,646,387	1,754,061	1,848,476	1,940,575
WY	186,282	190,205	194,451	197,524	201,114	205,770	221,582	233,411	246,667
TOT	62,531,373	64,779,104	67,663,848	70,337,126	73,686,872	76,139,326	80,867,012	85,415,920	89,405,266

(1) Prior to 1962 data not available on a comparable basis.
Source: U.S. Energy Information Administraton, Natural Gas Annuals
Note: The gallonage shown above represents consumption of motor gasoline, excluding sales to U.S. Government and sales of aviation gasoline.

Section VII
Table 8a

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1971	1972	1973	1974	1975	1976	1977	1978
AL	1,678,986	1,796,381	1,886,499	1,862,659	1,918,203	2,028,878	2,098,979	2,181,179
AK	92,064	111,594	123,995	163,070	193,725	214,140	204,006	209,118
AZ	998,011	1,094,225	1,201,122	1,147,782	1,191,998	1,250,917	1,325,630	1,405,574
AR	1,021,845	1,113,419	1,164,993	1,152,195	1,185,649	1,256,990	1,288,316	1,330,318
CA	9,363,091	9,995,752	10,307,287	9,887,993	10,166,056	10,684,270	11,242,281	11,754,669
CO	1,187,015	1,295,516	1,356,428	1,301,967	1,319,754	1,442,502	1,503,396	1,594,712
CT	1,261,342	1,309,281	1,324,085	1,327,308	1,351,553	1,393,196	1,417,026	1,432,855
DE	278,240	289,802	305,316	296,489	303,545	315,973	314,070	313,277
DC	232,950	232,422	248,626	240,457	243,215	229,031	225,434	221,831
FL	3,490,217	3,899,403	4,316,798	4,205,193	4,345,632	4,507,541	4,668,677	4,929,713
GA	2,466,166	2,679,515	2,830,556	2,739,639	2,773,264	2,913,600	3,002,467	3,114,628
HI	240,160	252,963	262,887	277,849	289,772	303,836	320,804	332,512
ID	421,403	451,315	468,321	457,785	482,462	520,640	530,225	563,708
IL	4,596,788	4,836,883	5,048,307	5,024,751	5,127,189	5,327,380	5,423,741	5,565,912
IN	2,590,540	2,740,984	2,846,485	2,739,043	2,762,822	2,801,466	2,911,250	3,017,500
IA	1,599,492	1,653,457	1,797,666	1,647,054	1,766,383	1,729,960	1,753,578	1,780,537
KS	1,339,516	1,428,354	1,377,262	1,329,122	1,378,773	1,462,585	1,433,106	1,504,662
KY	1,533,258	1,625,619	1,696,508	1,676,588	1,743,523	1,840,476	1,889,170	1,941,387
LA	1,538,410	1,685,138	1,744,770	1,756,343	1,830,011	1,986,865	2,076,160	2,157,919
ME	489,231	517,865	533,231	520,051	536,015	567,427	575,775	586,048
MD	1,664,565	1,775,394	1,840,506	1,789,440	1,880,724	1,962,715	2,027,804	2,065,378
MA	2,144,361	2,276,322	2,347,441	2,296,921	2,313,488	2,398,788	2,430,633	2,465,719
MI	4,268,082	4,537,187	4,748,355	4,565,132	4,630,247	4,885,908	4,950,597	5,010,304
MN	1,969,765	2,061,019	2,117,580	2,034,085	2,089,531	2,173,006	2,228,329	2,322,812
MS	1,103,053	1,202,673	1,234,423	1,195,373	1,192,595	1,254,446	1,322,865	1,332,417
MO	2,520,133	2,645,694	2,715,190	2,628,598	2,668,731	2,802,102	2,870,104	2,946,521
MT	425,158	427,048	440,456	448,019	461,411	493,245	511,714	531,445
NE	852,453	883,983	902,846	868,296	880,948	939,870	939,626	958,879
NV	333,806	365,954	389,776	382,610	409,496	434,031	464,832	509,705
NH	368,844	390,596	401,937	390,559	401,243	426,860	444,560	456,391
NJ	2,914,276	3,170,170	3,245,118	3,174,698	3,282,821	3,402,353	3,448,987	3,524,059
NM	603,704	646,830	686,811	683,532	708,455	760,885	779,366	821,722
NY	5,833,093	6,026,795	6,258,799	5,997,859	6,063,476	6,281,127	6,202,584	6,286,240
NC	2,497,823	2,713,709	2,813,722	2,820,286	2,864,661	3,012,863	3,123,577	3,259,167
ND	383,587	422,587	429,026	411,328	433,296	452,728	452,771	467,847
OH	4,695,627	4,960,046	5,194,284	5,006,097	5,095,243	5,273,960	5,445,906	5,510,753
OK	1,436,814	1,516,097	1,599,001	1,675,497	1,743,196	1,832,255	1,881,335	1,984,458
OR	1,116,118	1,191,714	1,239,689	1,187,671	1,224,276	1,310,983	1,369,886	1,441,886
PA	4,458,007	4,768,816	4,836,463	4,813,878	4,598,530	5,006,020	5,119,281	5,219,001
RI	392,111	401,314	407,135	371,740	395,532	384,525	405,832	412,404
SC	1,315,582	1,398,217	1,466,738	1,456,658	1,506,212	1,599,507	1,636,136	1,724,697
SD	439,796	464,493	474,646	456,444	501,055	474,182	489,910	497,196
TN	1,922,133	2,103,575	2,266,089	2,181,836	2,367,877	2,479,795	2,554,604	2,664,299
TX	6,464,768	6,888,155	7,350,539	7,099,280	7,535,342	8,077,479	8,496,289	8,737,658
UT	544,925	594,731	616,731	616,419	646,942	680,027	714,148	761,968
VT	226,536	242,597	245,662	235,325	240,270	255,094	260,155	269,204
VA	2,028,516	2,164,688	2,474,181	2,441,443	2,511,736	2,662,471	2,752,404	2,861,327
WA	1,577,951	1,647,546	1,716,314	1,666,944	1,741,625	1,863,713	1,954,975	2,052,403
WV	717,015	734,827	778,331	766,439	813,024	872,009	900,930	909,773
WI	2,013,424	2,146,830	2,208,977	2,145,544	2,197,391	2,299,086	2,356,462	2,448,434
WY	256,601	279,080	293,571	294,460	319,042	343,229	361,399	388,681
TOT	93,907,352	100,068,575	104,579,479	101,855,749	104,516,610	109,873,935	113,102,038	116,780,787

Source: Federal Highway Administration, "Monthly Motor Fuel Reported by States"
Note: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

Section VII
Table 8b

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1979	1980	1981	1982	1983	1984	1985
Alabama	2,093,703	1,962,046	1,849,225	1,840,396	1,861,406	1,905,267	1,881,466
Alaska	219,472	201,373	212,804	235,112	221,229	248,993	267,709
Arizona	1,412,930	1,328,722	1,344,438	1,341,613	1,410,904	1,489,965	1,555,905
Arkansas	1,269,750	1,178,800	1,137,998	1,123,466	1,128,357	1,193,067	1,166,202
California	11,515,926	10,992,050	10,842,862	10,660,534	11,032,662	11,413,578	11,656,251
Colorado	1,554,521	1,503,288	1,506,429	1,513,235	1,560,776	1,514,511	1,558,918
Connecticut	1,372,667	1,327,582	1,296,048	1,284,966	1,308,077	1,339,766	1,393,470
Delaware	306,489	293,851	290,581	282,463	308,772	320,247	326,204
Dist. of Col.	214,782	171,451	171,082	170,518	168,019	181,199	163,074
Florida	4,905,642	4,810,520	4,845,057	4,900,197	5,078,234	5,261,730	5,462,027
Georgia	3,022,565	2,874,923	2,809,969	2,818,366	2,904,369	3,053,861	3,148,673
Hawaii	332,490	354,529	347,848	349,098	355,332	371,084	349,709
Idaho	538,740	488,333	471,054	456,063	459,377	458,332	463,502
Illinois	5,186,151	4,816,780	4,598,012	4,522,361	4,609,320	4,733,589	4,836,654
Indiana	2,897,500	2,686,146	2,616,773	2,431,388	2,479,277	2,934,238	2,559,430
Iowa	1,718,515	1,561,192	1,474,522	1,420,817	1,394,722	1,398,211	1,369,838
Kansas	1,406,812	1,310,568	1,268,609	1,236,159	1,240,248	1,245,120	1,234,260
Kentucky	1,868,006	1,755,397	1,729,135	1,721,620	1,734,296	1,764,567	1,736,511
Louisiana	2,158,327	2,081,328	2,103,397	2,145,094	2,151,035	2,166,617	2,132,374
Maine	541,664	517,014	497,749	505,620	519,891	530,799	548,083
Maryland	1,950,162	1,941,209	1,919,423	1,888,873	1,892,434	1,959,267	1,976,290
Massachusetts	2,411,996	2,301,675	2,249,956	2,235,986	2,266,746	2,340,189	2,388,603
Michigan	4,756,597	4,274,036	4,014,363	3,795,814	3,680,884	4,042,348	4,086,109
Minnesota	2,221,623	2,045,270	1,984,982	1,931,205	1,985,492	2,084,655	2,136,370
Mississippi	1,292,209	1,194,845	1,208,384	1,151,872	1,158,134	1,191,027	1,231,066
Missouri	2,786,256	2,602,627	2,528,616	2,494,373	2,536,042	2,601,207	2,614,239
Montana	499,397	459,950	445,641	452,371	459,851	455,738	441,744
Nebraska	907,383	816,426	798,518	792,579	776,930	780,071	777,136
Nevada	500,916	500,286	508,535	490,270	489,835	504,530	509,110
New Hampshire	433,556	411,214	398,692	393,276	405,203	434,424	446,902
New Jersey	3,367,400	3,260,992	3,150,798	3,172,525	3,371,871	3,358,178	3,311,078
New Mexico	793,452	746,655	742,486	744,599	740,916	764,343	783,404
New York	5,871,929	5,672,549	5,674,946	5,617,353	5,491,074	6,148,506	5,941,935
North Carolina	3,129,488	2,932,274	2,874,700	2,842,968	2,911,221	3,042,021	3,092,963
North Dakota	443,692	407,250	408,449	403,067	390,085	390,514	385,715
Ohio	5,356,650	4,982,574	4,766,658	4,561,134	4,634,793	4,744,494	4,739,030
Oklahoma	1,897,821	1,845,259	1,922,403	1,929,207	1,907,622	1,877,793	1,890,867
Oregon	1,385,047	1,330,612	1,271,001	1,211,110	1,222,903	1,263,213	1,254,669
Pennsylvania	5,041,809	4,700,328	4,474,475	4,384,130	4,370,547	4,422,335	4,429,756
Rhode Island	397,229	381,826	368,524	360,833	365,634	369,612	379,026
South Carolina	1,657,831	1,554,787	1,529,196	1,515,808	1,539,188	1,601,942	1,630,720
South Dakota	458,549	423,517	403,635	393,021	389,287	389,407	387,453
Tennessee	2,528,233	2,417,939	2,388,466	2,355,395	2,331,655	2,501,396	2,534,948
Texas	8,710,656	8,106,499	8,149,252	8,201,687	8,393,680	8,501,979	8,899,228
Utah	730,529	734,992	768,450	734,020	725,317	854,992	755,798
Vermont	252,404	238,842	234,114	236,905	242,056	252,093	252,812
Virginia	2,739,763	2,599,199	2,530,673	2,493,638	2,554,245	2,665,515	2,719,453
Washington	1,996,081	1,882,513	1,872,364	1,851,127	1,919,152	2,000,333	1,912,436
West Virginia	888,849	845,242	804,632	810,848	801,736	800,672	801,431
Wisconsin	2,352,463	2,177,363	2,067,800	1,982,060	2,011,843	2,022,610	2,022,990
Wyoming	381,674	373,723	375,068	359,425	338,752	358,077	332,978
Total	112,678,296	106,378,366	104,248,792	102,747,065	104,231,431	108,248,222	108,876,519

NOTE: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

Source: Department of Transportation, Federal Highway Administration, Highway Statistics (Annual) Table MF-33GA.

Section VII
Table 8c

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1986	1987
Alabama	2,012,114	2,084,218
Alaska	256,534	242,578
Arizona	1,635,083	1,683,355
Arkansas	1,212,035	1,241,796
California	12,175,654	12,543,126
Colorado	1,592,000	1,565,700
Connecticut	1,443,603	1,484,832
Delaware	333,247	338,285
Dist. of Col.	167,549	181,371
Florida	5,690,765	5,914,696
Georgia	3,313,314	3,421,117
Hawaii	364,615	384,958
Idaho	469,394	462,202
Illinois	4,731,675	4,772,357
Indiana	2,622,218	2,745,535
Iowa	1,367,462	1,369,663
Kansas	1,248,854	1,265,811
Kentucky	1,850,343	1,855,460
Louisiana	2,160,554	2,062,830
Maine	582,048	606,596
Maryland	2,027,743	2,068,369
Massachusetts	2,458,079	2,491,662
Michigan	4,187,028	4,287,736
Minnesota	2,040,806	2,033,108
Mississippi	1,261,173	1,270,055
Missouri	2,762,114	2,754,512
Montana	443,446	440,858
Nebraska	776,830	776,125
Nevada	535,099	567,686
New Hampshire	481,789	514,167
New Jersey	3,524,601	3,586,002
New Mexico	800,775	812,713
New York	5,957,386	6,168,884
North Carolina	3,227,688	3,318,096
North Dakota	376,068	381,284
Ohio	4,878,206	5,012,222
Oklahoma	1,848,704	1,772,817
Oregon	1,294,515	1,312,919
Pennsylvania	4,523,848	4,590,386
Rhode Island	394,173	396,573
South Carolina	1,700,307	1,680,761
South Dakota	394,961	392,527
Tennessee	2,651,534	2,754,514
Texas	9,085,634	8,865,928
Utah	766,726	764,441
Vermont	259,631	282,232
Virginia	2,815,511	2,993,746
Washington	2,034,097	2,215,360
West Virginia	806,401	829,349
Wisconsin	2,061,116	2,046,604
Wyoming	328,877	313,409
TOTAL	111,933,927	113,930,521

NOTE: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

Source: Department of Transportation, Federal Highway Administration, Table MF-33GA.

Section VII
Table 9

U.S. SALES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
AL	1,937	2,493	2,340	2,692	2,846	3,073	3,186	3,508	3,914	4,277	4,326	4,346	4,891	5,370
AK	--	--	--	--	--	--	--	--	--	--	--	--	2,618	2,616
AZ	1,173	1,342	1,021	1,020	1,233	1,341	1,329	1,279	1,073	1,716	1,742	2,018	2,100	2,774
AR	1,733	1,838	2,162	2,414	2,244	2,325	2,222	2,136	2,357	2,558	2,575	2,433	2,175	2,052
CA	20,481	22,573	21,232	19,212	22,031	23,875	24,063	23,812	23,873	24,643	24,613	24,884	26,357	26,697
CO	1,724	1,976	1,683	1,831	2,036	2,503	2,732	3,108	3,371	3,532	3,585	3,238	3,099	4,225
CT	8,635	10,487	9,510	11,067	11,777	12,286	12,520	14,928	16,071	18,490	18,574	23,885	22,176	23,230
DE	783	866	1,013	1,285	1,556	1,702	1,861	2,365	2,677	3,235	3,245	2,413	2,487	2,723
DC	2,733	2,789	2,246	2,433	2,982	3,368	3,458	3,728	3,907	4,139	4,124	3,402	2,719	2,914
FL	3,760	4,068	3,824	4,648	5,343	6,863	7,176	8,441	9,613	10,169	10,188	8,150	8,190	8,971
GA	1,956	2,593	2,604	3,202	3,962	4,262	4,119	4,225	4,560	4,914	4,877	4,887	4,731	5,117
HI	--	--	--	--	--	--	--	--	--	--	--	--	--	876
ID	1,034	1,570	1,562	1,770	2,291	2,457	2,595	3,080	3,706	3,837	3,834	3,938	3,734	4,055
IL	20,906	21,622	19,582	26,320	28,517	29,061	29,021	30,388	33,371	35,290	35,350	42,869	43,008	42,490
IN	6,153	8,429	8,080	10,776	13,205	13,968	15,166	16,294	18,962	20,441	20,482	24,099	24,500	25,596
IA	6,099	7,435	7,610	8,925	9,791	10,204	10,488	10,399	11,417	12,543	12,548	9,883	11,360	11,141
KS	2,881	4,094	3,185	4,527	5,552	5,695	5,938	5,897	6,493	6,388	6,361	4,477	5,060	4,751
KY	1,586	1,980	1,956	2,274	2,753	3,250	3,359	3,291	4,126	4,476	4,548	4,978	5,800	4,833
LA	3,274	4,268	4,021	4,619	5,224	5,840	6,212	6,242	7,385	7,653	7,877	10,756	11,249	10,694
ME	2,266	2,638	2,576	3,496	3,935	4,276	4,514	5,309	5,703	6,425	6,426	6,434	7,108	7,456
MD	7,551	8,442	7,691	8,981	10,898	11,189	11,731	14,468	16,009	17,916	18,091	16,086	12,495	13,101
MA	19,290	20,919	19,741	22,769	27,261	28,064	27,925	31,306	34,036	35,859	35,981	47,452	47,781	51,022
MI	12,277	13,713	14,562	18,493	20,334	22,268	22,351	24,625	27,402	29,071	28,995	29,385	28,387	30,464
MN	9,327	10,229	10,094	12,448	14,560	15,478	15,784	16,218	17,409	18,765	18,726	16,468	15,079	16,241
MS	912	1,002	1,010	1,271	1,507	1,502	1,774	1,619	1,808	1,840	1,856	1,744	2,318	2,364
MO	7,072	8,110	6,822	7,815	8,684	10,224	10,854	11,283	12,137	12,306	12,418	14,274	12,700	12,830
MT	1,660	1,810	1,965	2,478	2,851	3,063	3,553	3,755	3,980	4,219	4,209	3,642	4,474	4,877
NE	3,340	3,744	3,386	3,707	3,829	4,071	4,378	4,723	5,229	5,561	5,549	3,527	3,929	4,183
NV	951	1,363	1,772	1,843	2,102	2,158	2,281	2,375	1,686	1,748	1,679	1,656	2,051	2,428
NH	1,387	1,455	1,945	2,765	3,102	3,442	3,370	4,220	4,498	5,123	5,089	3,951	4,049	4,484
NJ	26,011	28,755	26,993	30,521	32,298	33,028	33,124	35,733	38,971	41,335	41,370	42,923	45,634	45,542
NM	708	653	715	950	972	1,224	1,309	1,457	1,991	2,167	2,205	2,492	2,302	3,065
NY	38,888	45,902	45,252	52,173	56,334	59,373	59,604	64,262	70,276	72,606	72,755	85,779	79,499	81,677
NC	2,552	3,220	3,491	4,354	5,490	6,360	7,381	7,860	8,982	9,279	9,312	10,406	11,544	13,353
ND	1,067	1,312	1,616	1,939	2,026	2,456	2,425	2,600	3,151	3,740	3,726	2,976	3,632	3,775
OH	7,479	10,120	9,442	12,059	14,474	15,953	16,542	18,150	20,184	21,937	22,045	24,221	24,850	23,836
OK	1,084	1,571	1,929	1,928	2,223	2,192	2,436	2,368	2,493	2,454	2,470	1,754	2,603	2,631
OR	5,720	6,181	6,343	7,725	8,534	8,974	8,680	8,939	10,981	10,862	10,132	9,380	10,456	10,920
PA	19,916	22,198	20,849	28,266	34,585	35,827	36,513	40,288	44,286	45,734	45,698	45,322	44,029	45,668
RI	3,389	3,413	3,408	4,116	4,260	4,343	4,482	4,484	4,762	5,513	5,530	7,250	7,167	8,093
SC	1,427	1,662	1,630	1,854	2,202	2,491	3,004	2,990	3,259	3,445	3,588	4,266	4,454	5,203
SD	1,338	1,434	1,510	1,893	2,133	2,399	2,626	2,756	3,298	3,556	3,508	2,800	2,882	2,964
TN	2,018	2,143	2,125	3,062	3,428	3,487	3,628	3,529	3,845	3,767	3,652	3,226	5,037	5,268
TX	8,035	10,120	9,238	12,790	16,183	19,022	19,046	18,913	20,728	22,258	22,812	24,077	26,541	24,315
UT	1,223	1,448	1,474	2,001	2,334	3,263	3,542	3,574	3,994	4,235	4,256	4,655	3,478	3,841
VT	816	875	1,054	1,117	1,166	1,212	1,321	1,415	1,726	1,937	1,883	2,796	2,399	2,939
VA	4,539	5,319	5,380	7,855	9,156	9,800	9,442	10,888	13,242	14,293	14,782	13,300	12,984	14,184
WA	9,602	11,005	11,215	12,954	14,145	14,904	14,277	15,438	17,767	17,237	17,518	14,915	16,867	18,045
WV	475	585	554	651	1,229	1,188	1,331	1,307	1,500	2,095	2,039	1,913	2,154	2,462
WI	8,203	8,609	8,279	10,285	11,437	11,803	11,877	13,648	16,089	17,099	17,149	20,136	20,316	21,711
WY	643	1,600	1,504	1,732	1,893	2,103	2,294	2,624	2,829	3,092	2,977	3,697	3,539	3,258
TOT	298,014	341,973	329,196	395,306	448,908	479,210	488,844	526,245	581,127	615,775	617,275	653,559	658,992	683,325

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

U.S. SALES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Gallons)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Alabama	4,310	4,938	5,148	5,887	5,335	5,239	4,148	6,556	7,378	8,510	8,849	12,093
Alaska	2,849	2,897	3,076	3,482	3,733	4,049	4,353	4,757	4,869	5,082	6,352	6,207
Arizona	3,107	3,001	3,520	3,528	3,584	4,030	3,761	4,599	4,722	4,898	5,242	8,786
Arkansas	3,078	2,451	2,579	3,358	2,899	3,259	3,282	4,079	4,647	5,474	5,489	9,412
California	27,410	29,685	32,256	34,991	35,672	38,335	38,767	38,519	39,112	39,188	47,357	45,797
Colorado	4,441	4,148	4,580	4,074	4,002	4,670	4,811	5,574	5,490	5,211	6,242	6,784
Connecticut	23,199	23,099	22,906	20,378	21,415	20,408	20,785	21,748	22,673	24,147	24,100	24,735
Delaware	2,537	3,097	3,474	3,257	3,361	3,381	3,417	3,918	4,097	4,309	4,345	4,298
Dist. of Col.	2,726	2,878	2,872	2,957	3,566	3,489	3,424	3,525	4,377	4,934	3,834	3,314
Florida	9,369	10,611	10,902	11,076	12,456	14,179	13,733	14,794	14,913	15,698	16,525	19,488
Georgia	5,269	6,218	6,969	6,977	8,666	10,059	11,558	12,013	12,540	12,784	14,638	16,491
Hawaii	1,666	1,641	1,375	1,769	1,613	1,369	1,190	1,381	1,573	1,695	1,706	1,622
Idaho	4,037	4,204	4,108	4,501	4,880	4,916	7,433	7,748	5,844	5,597	5,702	5,866
Illinois	42,255	41,361	41,421	41,580	41,702	39,831	39,846	42,795	44,498	44,517	49,467	55,276
Indiana	25,452	25,743	25,934	25,813	26,340	26,338	26,538	27,355	29,493	29,363	30,670	34,233
Iowa	10,043	11,022	11,106	10,968	11,256	12,579	12,823	14,172	13,828	13,681	14,242	14,975
Kansas	5,187	5,242	4,612	5,487	5,405	6,310	6,009	6,660	6,488	7,559	8,401	9,166
Kentucky	4,426	5,822	5,532	5,697	5,659	7,068	6,901	7,304	7,865	8,209	7,776	9,470
Louisiana	9,038	9,622	9,762	9,688	8,517	9,284	7,847	9,858	10,737	11,796	13,384	17,644
Maine	8,307	8,645	9,487	8,792	9,424	9,038	10,110	10,647	11,417	11,837	12,120	12,744
Maryland	14,257	15,146	16,014	16,863	17,361	18,016	17,851	18,759	18,618	19,860	20,000	21,435
Massachusetts	52,266	53,448	51,664	49,966	56,694	51,262	54,943	56,315	58,399	59,211	61,609	63,616
Michigan	30,547	31,131	30,471	29,576	31,079	32,127	37,376	36,601	37,473	38,108	41,684	48,660
Minnesota	15,967	16,776	16,629	16,739	19,227	21,195	20,083	22,233	22,121	22,390	23,777	25,979
Mississippi	1,954	2,715	2,885	3,322	2,841	3,169	3,459	5,097	5,775	5,987	7,215	9,413
Missouri	12,858	13,412	13,939	13,884	14,077	13,908	13,924	17,067	16,473	16,218	16,350	18,101
Montana	5,248	5,522	5,400	5,684	5,041	5,802	3,459	4,119	4,669	4,823	5,709	6,121
Nebraska	4,481	4,099	4,387	4,689	3,789	4,590	5,311	6,487	6,492	7,459	7,604	9,002
Nevada	2,985	3,017	2,844	3,523	2,821	2,495	2,350	2,693	2,767	2,832	3,151	2,924
New Hampshire	5,486	5,834	6,327	5,742	5,907	6,073	6,823	7,106	7,490	7,676	8,085	8,303
New Jersey	46,992	48,622	51,466	51,655	54,123	57,123	58,871	60,056	62,077	63,447	64,769	72,659
New Mexico	2,841	3,512	3,642	3,946	3,971	3,647	3,064	4,183	4,547	5,405	5,395	6,569
New York	86,029	94,501	95,856	94,610	104,690	102,827	107,192	106,843	108,646	111,122	113,833	122,075
N. Carolina	13,366	15,617	16,000	16,249	17,428	20,869	20,577	19,944	20,407	22,553	21,609	23,030
N. Dakota	3,693	4,472	4,584	4,529	5,252	6,008	6,036	6,156	5,959	4,973	4,915	5,135
Ohio	23,433	24,250	26,348	27,121	28,132	31,216	31,161	34,025	34,386	34,435	35,090	41,414
Oklahoma	3,152	3,243	3,729	3,325	2,950	3,618	3,980	5,173	4,961	5,573	5,473	7,828
Oregon	11,061	11,777	12,828	13,855	13,295	13,837	13,083	13,298	13,646	12,895	14,162	15,467
Pennsylvania	45,982	49,315	51,702	50,699	54,818	54,501	57,146	59,721	60,668	63,544	63,221	70,757
Rhode Island	7,547	7,411	7,391	6,272	7,017	6,627	7,287	7,746	8,517	8,623	9,070	9,176
S. Carolina	5,116	5,776	6,169	5,228	4,910	6,541	6,542	7,788	8,543	9,469	9,114	9,722
S. Dakota	3,085	3,212	3,370	3,823	3,838	4,130	3,875	3,830	3,802	4,372	4,600	4,469
Tennessee	5,552	6,167	6,706	6,784	7,414	9,404	8,902	10,278	10,432	10,945	11,609	14,218
Texas	21,795	23,959	24,092	23,998	25,280	23,311	23,022	24,457	29,791	32,398	34,884	46,515
Utah	3,085	3,607	3,640	3,766	4,275	4,886	4,702	4,750	5,028	5,104	6,515	6,310
Vermont	3,299	3,602	3,787	3,603	4,318	4,825	4,946	5,058	5,514	5,732	5,472	5,729
Virginia	14,631	15,843	16,945	16,542	18,941	21,304	21,796	22,286	23,218	24,624	24,441	25,020
Washington	17,532	17,057	16,791	17,997	17,390	17,910	16,459	17,792	18,201	18,188	18,621	19,090
W. Virginia	2,525	2,490	2,622	2,320	2,882	3,177	3,303	3,743	3,786	3,913	4,658	5,532
Wisconsin	22,153	23,399	23,461	23,328	23,902	24,446	26,918	26,341	26,084	25,827	26,520	26,781
Wyoming	3,250	3,838	3,816	3,653	3,743	3,038	4,023	5,153	5,249	5,055	5,724	5,419
TOTAL	690,874	729,095	748,124	747,551	786,891	809,713	829,200	873,100	900,300	927,250	971,320	1,074,870

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

Section VII
Table 9b

U.S. DELIVERIES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1973	1974	1975	1976(1)	1977(1)	1978(1)	1979	1980	1981	1982	1983
AL	13,988	14,761	14,488	18,032	19,624	20,194	15,996	19,419	17,939	15,436	15,457
AK	6,384	6,591	6,946	9,517	10,187	10,571	5,808	6,781	6,548	6,335	7,066
AZ	15,118	11,197	11,481	10,181	13,727	13,829	13,194	11,330	9,741	8,102	8,792
AR	9,949	10,316	9,392	10,228	12,451	13,014	16,163	14,209	13,116	13,336	13,389
CA	51,165	42,991	43,129	45,545	54,009	60,126	68,104	61,338	67,494	67,337	68,413
CO	7,737	8,712	8,590	9,408	9,668	10,023	10,451	9,665	8,634	9,132	10,915
CT	25,181	22,677	21,844	23,706	23,249	23,011	27,916	22,499	19,745	20,509	16,933
DE	4,382	4,310	4,487	4,615	5,096	4,840	3,685	3,702	3,133	2,753	3,376
DC	3,462	3,497	3,112	3,781	4,005	6,204	4,364	3,436	2,125	2,215	2,769
FL	22,662	22,599	23,083	24,268	28,236	28,920	28,084	28,520	29,816	22,503	27,765
GA	20,478	20,835	16,922	22,480	22,559	19,641	18,692	19,397	19,388	18,387	21,917
HI	1,839	1,897	2,512	2,370	3,502	3,246	6,451	5,915	6,043	4,570	2,327
ID	6,297	6,876	7,378	7,346	7,983	8,362	6,504	4,879	4,775	4,496	5,263
IL	54,288	53,950	52,103	58,877	58,459	61,760	48,584	36,086	34,427	32,521	35,503
IN	34,353	34,516	33,314	36,193	38,044	39,278	35,653	30,488	28,961	28,913	27,720
IA	15,467	14,751	14,249	15,257	16,012	16,687	20,595	15,793	14,374	16,212	14,086
KS	10,330	11,080	11,328	11,986	12,484	14,317	18,960	13,923	13,239	13,817	13,921
KY	10,457	10,176	10,760	13,566	16,845	18,809	20,608	22,598	18,217	17,507	20,442
LA	24,677	24,766	22,139	23,324	32,251	33,185	37,224	32,804	37,964	30,858	31,105
ME	12,147	11,659	11,331	13,407	14,476	13,373	11,218	10,627	9,266	9,189	7,325
MD	22,591	22,094	21,712	20,571	21,748	21,341	23,971	22,417	18,365	16,198	18,881
MA	62,970	58,934	57,195	61,666	59,564	57,446	42,347	37,413	32,155	32,263	31,364
MI	47,146	44,204	41,747	43,826	44,835	45,461	30,892	27,841	26,657	22,819	22,525
MN	26,768	24,185	23,974	27,513	26,645	27,807	26,069	21,826	18,714	20,880	17,413
MS	13,045	14,372	12,188	13,713	14,584	16,306	12,277	12,905	13,487	11,849	13,306
MO	18,781	17,424	17,106	19,555	20,588	23,027	22,780	18,150	18,003	20,738	16,762
MT	6,924	7,646	7,459	8,383	8,141	8,114	7,774	6,626	6,486	5,814	8,883
NE	9,262	8,684	8,363	10,178	10,643	12,127	12,601	9,145	8,233	9,176	11,580
NV	3,304	2,561	2,535	2,715	3,055	3,822	3,189	4,022	3,488	3,518	5,304
NH	8,208	7,551	7,047	8,758	8,231	8,292	5,741	5,845	5,313	5,084	4,520
NJ	74,564	67,426	58,937	61,787	60,052	56,592	50,447	52,719	50,973	45,546	38,917
NM	7,948	7,635	8,080	8,022	9,337	9,633	10,431	10,222	12,526	7,954	6,705
NY	120,200	108,677	104,646	115,237	114,446	114,344	88,449	72,515	64,263	62,608	56,525
NC	24,898	22,246	20,965	23,881	27,107	24,749	29,404	23,820	21,228	20,184	24,626
ND	4,626	4,303	4,362	4,061	4,069	4,194	8,268	8,037	7,708	7,209	6,867
OH	41,415	40,831	42,160	51,519	52,501	55,346	44,952	48,397	44,959	40,250	33,180
OK	8,814	8,744	9,696	11,775	12,775	14,477	14,119	12,051	15,519	14,557	16,635
OR	16,070	14,324	13,240	14,062	16,794	16,671	19,281	17,051	16,492	15,020	16,094
PA	70,793	71,508	66,341	74,691	77,861	73,311	76,651	68,066	59,977	53,065	51,763
RI	8,633	8,038	7,787	8,478	8,199	7,679	7,042	5,046	3,993	3,984	4,736
SC	10,956	9,638	8,132	10,218	12,972	11,023	11,894	10,730	9,841	9,462	10,592
SD	4,140	3,586	3,821	3,311	3,042	3,670	6,166	4,842	4,406	5,131	4,464
TN	15,310	15,815	17,657	21,469	24,071	26,825	23,504	18,818	19,512	18,764	21,519
TX	57,567	58,766	55,262	58,655	74,678	81,171	96,359	95,939	90,359	90,180	95,849
UT	7,792	8,624	8,962	8,367	8,631	9,023	8,150	7,412	7,115	6,425	6,459
VT	6,001	4,981	4,566	5,394	5,274	5,135	5,389	4,076	3,828	2,707	3,457
VA	26,561	24,938	24,534	25,339	28,332	27,161	33,726	24,406	23,638	21,943	25,087
WA	20,091	16,345	16,606	18,405	19,800	20,765	21,776	18,709	17,695	18,200	16,382
WV	5,992	5,622	6,478	6,807	9,019	8,796	10,904	10,340	9,450	7,659	9,930
WI	27,264	26,330	26,035	30,366	31,107	32,940	31,504	22,539	20,726	20,537	20,399
WY	6,138	6,897	7,565	8,120	9,211	10,423	10,063	11,375	12,452	11,015	7,219
TOT	1,135,063	1,081,086	1,043,746	1,150,929	1,230,179	1,257,061	1,214,374	1,086,709	1,032,476	974,864	981,926

Source: U.S. Department of Energy, Sales of Fuel Oil and Kerosine, Petroleum Supply Annuals, and Petroleum Marketing Monthly, July 1985

U.S. DELIVERIES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1984	1985	1986	1987
Alabama	16,234	16,402	16,596	18,885
Alaska	7,840	10,163	7,994	8,198
Arizona	9,885	10.049	11,147	10,405
Arkansas	16,243	15,076	13,536	13,703
California	76,288	72,468	74,955	74,040
Colorado	11,344	9,621	10,140	9,876
Connecticut	18,544	18,937	20,501	21,082
Delaware	3,556	3,398	3,281	4,047
Dist. of Col.	3,054	2,476	2,835	2,668
Florida	29,210	30,320	31,953	32,960
Georgia	23,865	23,676	24,528	26,007
Hawaii	2,766	4,631	4,676	4,289
Idaho	5,898	5,596	5,914	6,390
Illinois	37,485	32,699	35,073	34,387
Indiana	31,123	30,734	31,758	31,750
Iowa	15,314	15,461	15,898	15,750
Kansas	15,068	14,954	14,201	16,644
Kentucky	22,061	21,722	20,311	20,547
Louisiana	31,448	33,660	35,006	36,727
Maine	8,339	9,580	11,470	11,965
Maryland	18,704	17,849	17,747	18,021
Massachusetts	32,693	32,511	34,707	36,951
Michigan	24,282	25,625	26,691	25,615
Minnesota	18,142	19,463	18,956	18,326
Mississippi	14,118	15,923	14,842	16,732
Missouri	18,543	19,532	18,358	19,344
Montana	9,366	11,334	6,999	6,548
Nebraska	12,007	12,356	12,004	13,324
Nevada	5,561	5,431	5,575	6,506
New Hampshire	4,762	5,246	5,765	7,539
New Jersey	40,323	40,122	45,606	43,194
New Mexico	7,103	8,513	9,704	10,632
New York	58,478	61,513	70,851	72,661
North Carolina	26,155	24,853	27,585	28,376
North Dakota	7,405	7,495	7,394	6,810
Ohio	35,888	36,069	35,814	33,555
Oklahoma	17,931	18,341	13,836	13,897
Oregon	15,728	15,429	14,889	16,207
Pennsylvania	54,048	53,042	53,529	57,419
Rhode Island	4,905	4,457	5,308	6,045
South Carolina	11,520	11,814	11,716	11,913
South Dakota	4,876	4,989	6,044	5,892
Tennessee	23,895	22,309	22,414	22,464
Texas	96,771	95,235	86,265	88,658
Utah	6,997	5,951	7,428	6,792
Vermont	3,709	4,182	3,943	4,355
Virginia	25,948	25,263	28,439	29,361
Washington	18,187	20,408	23,288	21,243
West Virginia	10,424	9,779	7,583	8,912
Wisconsin	21,867	22,516	21,825	21,033
Wyoming	7,321	7,697	6,864	8,767
TOTAL	1,041,217	1,046,827	1,063,740	1,086,413

Source: U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

Section VII
Table 10

U.S. DELIVERIES OF DISTILLATE FUEL OIL BY USES
(Thousands of Barrels)

Year	Heating Oils	Industrial Use	Oil Company Fuel	Electric Utility Company	Railroads	Vessel Bunkering	Military Use	Diesel	All Other	Total
1947	189,991	24,489	2,191	14,216	23,619	14,475	5,176	14,579	9,278	298,014
1948	213,558	29,932	3,625	14,856	31,006	14,511	9,071	15,971	9,443	341,973
1949	202,666	26,424	4,151	12,550	38,604	13,121	6,109	16,734	8,837	329,196
1950	235,740	37,121	5,692	13,207	48,703	12,872	6,553	21,333	14,085	395,306
1951	265,982	42,567	7,811	9,612	59,962	14,393	8,430	25,485	14,666	448,908
1952	279,326	42,760	7,976	8,350	68,002	17,213	9,644	30,551	15,388	479,210
1953	283,100	42,384	7,755	6,825	75,246	16,898	9,569	34,980	12,087	488,844
1954	320,117	41,589	7,699	6,070	77,389	15,563	8,752	38,809	10,257	526,245
1955	356,589	43,606	8,597	5,884	84,668	16,675	10,945	44,215	9,948	581,127
1956	377,262	44,949	10,131	5,403	89,439	18,487	11,326	48,870	9,908	615,775
1957	377,044	43,523	10,419	5,296	88,315	20,420	12,737	49,684	9,828	617,275
1958	412,670	37,553	7,815	5,382	83,719	18,768	13,412	65,186	9,054	653,559
1959(2)	415,521	33,380	8,642	5,005	87,802	19,250	11,394	70,527	7,471	658,992
1960(3)	438,010	34,271	8,347	4,742	86,490	18,730	10,793	74,562	7,380	683,325
1961	450,292	31,226	8,743	4,151	85,180	14,566	11,484	77,825	7,407	690,874
1962	466,830	34,951	9,055	4,100	86,803	15,836	13,041	89,729	8,750	729,095
1963	465,315	36,647	10,253	4,149	88,117	15,148	13,436	106,341	8,718	748,124
1964	451,860	36,007	10,576	3,849	88,198	16,001	13,609	117,534	9,917	747,551
1965	475,992	42,484	10,430	3,661	86,436	15,532	14,953	124,122	13,281	786,891
1966	472,778	47,108	10,485	3,612	89,104	16,642	16,303	135,776	17,905	809,713
1967	501,026	44,997	8,997	2,858	88,688	17,478	17,325	(1)	47,831	829,200
1968	510,682	45,795	9,975	8,509(4)	84,030	18,235	12,593	171,773	11,508	873,199
1969	511,768	42,456	13,867	12,158	86,429	18,877	13,958	188,253	12,534	900,300
1970	521,135	43,668	11,518	24,770	88,416	19,503	12,447	194,919	10,874	927,250
1971	522,475	50,731	14,088	35,329	86,251	20,959	17,427	213,906	10,154	971,320
1972	543,337	60,388	13,405	68,334	97,001	22,125	20,187	239,241	10,852	1,074,870
1973	536,856	67,306	14,902	77,950	102,828	26,786	19,598	276,961	11,876	1,135,063
1974	493,223	64,036	13,805	84,661	102,949	24,757	17,748	269,776	10,131	1,081,086

(1) Data not available
(2) Includes Alaska
(3) Includes Alaska and Hawaii
(4) Includes gas turbine plants in 1968 and subsequent years

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

Section VII
Table 10a

U.S. DELIVERIES OF DISTILLATE FUEL OIL BY USES
(Thousands of Barrels)

Year	Heating Oils(5)(9)	Industrial Use(6)	Oil Company Fuel	Electric Utility Company(7)	Railroads	Vessels Bunkering	Military Use(8)	Diesel	All Other	Total
1975	488,388	63,993	13,633	63,420	92,191	26,138	18,004	266,883	10,096	1,043,746
1976	543,895	79,956	14,523	60,570	97,467	28,330	17,574	297,249	11,365	1,150,929
1977	538,845	96,502	19,954	76,681	99,306	33,512	20,121	330,864	14,394	1,230,179
1978	533,069	94,797	19,410	77,175	99,841	37,591	20,320	360,799	14,059	1,257,061
1979	454,955	99,583	22,043	46,579	103,493	41,725	18,570	392,614	34,812	1,214,374
1980	393,112	86,089	24,205	31,812	102,022	35,201	19,138	375,136	19,994	1,086,709
1981	345,728	80,216	29,185	18,192	100,482	41,025	17,763	378,853	21,032	1,032,476
1982	324,912	71,340	29,482	12,134	93,150	33,885	15,201	375,124	19,639	974,864
1983	339,455	54,030	21,510	11,744	76,230	39,108	15,804	408,594	15,541	981,926
1984	352,127	56,114	21,623	16,405	82,308	40,287	16,579	439,786	15,988	1,041,217
1985	358,129	61,730	20,869	12,246	76,422	45,102	18,290	411,420	4,198	1,046,827
1986	356,380	63,907	17,857	14,628	73,800	48,434	18,105	467,280	3,349	1,063,740
1987	355,899	69,467	20,994	15,383	74,944	52,935	21,057	473,930	1,805	1,086,413

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(5) Includes range oil
(6) Excludes oil company use
(7) Includes kerosine-type jet fuel: 1976 -- 11,600 bbls. per day; 1977 -- 18,770 bbls. per day; 1978 -- 12,342 bbls. per day.
(8) Includes imports by military
(9) Beginning in 1979, heating oils is no longer a separate category. The figure is derived by adding residential, commercial and farming.

Source: 1975-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1987 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

Section VII
Table 11

U.S. SALES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
AL	3,294	2,296	1,891	2,271	2,417	2,677	3,873	3,123	3,907	4,162	4,203	4,240	4,178	4,202
AK	--	--	--	--	--	--	--	--	--	--	--	--	574	695
AZ	3,491	1,841	1,087	1,448	1,157	542	206	45	61	35	21	37	34	95
AR	2,253	2,080	1,833	2,273	2,051	1,497	1,006	415	419	545	549	455	346	474
CA	90,916	79,081	77,171	78,397	85,884	79,127	85,870	79,973	83,959	84,421	79,245	72,232	72,287	78,774
CO	1,218	886	783	1,050	1,068	1,203	1,124	1,326	1,363	1,434	1,369	1,330	1,603	1,790
CT	8,838	10,066	14,515	16,845	14,888	13,475	14,377	12,897	13,108	13,219	12,712	17,041	15,814	14,450
DE	1,139	1,043	1,921	2,373	1,888	2,501	2,558	2,228	2,907	2,956	2,973	5,992	7,063	6,081
DC	935	855	1,427	1,188	1,688	1,915	2,035	1,963	2,152	2,106	2,501	2,243	2,450	2,387
FL	15,519	16,132	15,671	17,009	20,322	24,789	27,343	28,909	32,236	34,910	36,228	37,470	33,310	28,978
GA	2,933	3,375	4,227	4,733	5,619	5,816	5,573	5,590	6,118	5,955	6,128	7,145	6,824	6,413
HI	--	--	--	--	--	--	--	--	--	--	--	--	--	5,613
ID	460	456	480	629	945	1,029	1,067	1,115	1,421	1,256	1,185	210	185	201
IL	17,047	15,276	15,570	19,517	20,257	20,455	20,823	20,499	22,227	22,571	21,375	26,926	23,689	25,893
IN	12,386	13,497	13,343	15,841	16,850	17,230	17,679	14,234	14,588	15,206	14,753	11,955	13,035	12,885
IA	777	742	1,176	1,321	1,365	1,217	1,051	884	994	1,165	1,125	869	1,088	1,021
KS	11,224	10,166	8,226	5,893	7,110	6,071	5,247	4,020	4,179	3,827	3,586	1,420	1,943	2,249
KY	824	1,303	1,679	1,260	1,007	738	913	949	1,013	1,062	1,051	503	570	321
LA	14,835	19,434	15,220	11,221	10,953	10,422	9,929	9,710	10,601	10,804	11,359	13,411	10,764	8,599
ME	2,809	2,342	2,704	3,550	3,178	4,032	4,228	3,481	4,443	4,872	5,063	5,290	6,433	5,742
MD	17,119	13,276	13,521	14,168	15,814	14,852	15,323	14,031	15,466	15,770	15,364	14,974	17,385	16,490
MA	16,976	18,082	23,476	30,715	29,883	30,003	32,763	30,500	30,496	29,574	28,744	29,308	35,532	38,942
MI	7,046	11,051	11,403	12,708	13,743	14,153	14,809	14,675	15,387	16,008	15,330	9,340	13,498	11,242
MN	1,022	1,315	1,467	2,432	2,431	2,430	2,370	2,352	2,700	2,987	2,955	4,963	6,399	6,393
MS	343	411	314	348	257	173	163	160	179	219	232	268	435	339
MO	6,920	6,609	5,260	5,389	5,379	5,146	5,140	4,837	5,863	6,126	5,758	3,774	3,129	3,026
MT	5,444	4,935	3,702	4,222	4,958	4,220	3,276	1,751	1,692	1,646	1,554	1,643	2,006	2,002
NE	378	329	422	550	467	334	351	313	363	377	375	151	218	378
NV	5,957	4,372	1,514	2,889	2,685	2,266	2,048	1,353	1,359	383	269	195	146	202
NH	959	909	1,175	1,873	2,326	2,295	2,467	2,129	2,377	2,107	2,096	2,022	2,984	2,324
NJ	46,167	33,680	37,973	49,092	44,775	44,153	47,667	43,339	46,154	44,587	45,136	36,841	41,422	42,971
NM	840	685	460	696	532	831	696	262	283	505	438	359	107	173
NY	32,907	45,871	49,168	61,829	52,684	50,966	53,437	50,809	51,912	51,737	51,158	71,533	79,784	76,586
NC	433	461	560	990	1,109	1,257	1,439	1,809	2,377	2,558	2,467	3,034	3,908	4,537
ND	414	447	358	297	224	120	124	179	515	870	783	625	597	663
OH	16,534	16,089	16,779	18,004	18,017	17,670	18,698	18,118	18,915	19,206	18,530	9,721	11,028	11,382
OK	8,276	7,723	5,438	4,783	3,890	3,011	2,351	1,479	1,783	1,857	1,740	1,001	1,319	1,396
OR	15,482	14,892	12,845	12,429	12,215	13,168	11,186	9,776	10,152	9,401	7,181	5,253	5,121	5,453
PA	35,794	37,240	35,391	41,110	42,614	42,491	42,951	42,734	45,176	45,325	44,482	39,873	45,660	42,731
RI	7,088	7,917	8,508	10,891	10,030	9,756	10,993	9,473	11,215	11,303	11,114	11,127	10,350	9,502
SC	2,349	2,496	2,610	3,652	4,145	5,230	5,332	3,985	4,291	4,389	4,383	4,660	4,886	4,634
SD	257	288	262	294	231	239	232	165	176	211	217	100	48	60
TN	1,015	890	919	1,398	1,331	1,097	1,257	652	930	879	865	384	284	184
TX	66,789	63,376	48,481	48,560	50,464	46,508	41,978	36,312	38,108	37,883	37,859	29,082	25,275	22,102
UT	1,486	1,585	3,639	4,767	4,979	5,351	5,044	4,321	4,392	4,478	4,201	5,077	5,872	5,562
VT	262	258	281	382	300	300	475	409	424	402	380	455	275	498
VA	11,298	10,590	12,200	12,883	18,037	20,294	15,523	12,998	16,556	17,452	17,739	21,411	17,703	17,448
WA	14,149	13,304	12,043	13,715	14,644	17,025	14,328	14,978	16,405	16,975	11,795	8,747	9,162	9,179
WV	828	1,171	1,366	1,587	1,464	1,337	1,526	1,269	1,355	1,317	1,321	894	1,620	1,451
WI	1,358	1,497	1,515	1,712	1,861	2,042	2,118	2,109	2,168	2,290	2,201	3,458	4,167	4,275
WY	2,741	3,877	2,959	3,024	3,252	2,819	2,762	2,076	2,118	2,156	1,847	2,325	1,842	1,738
TOT	520,529	506,497	494,933	554,208	563,338	556,273	564,729	520,714	556,983	561,538	543,950	531,367	554,352	550,536

Source: Bureau of Mines, Mineral Industry Surveys, "Sales of Fuel Oil and Kerosine," Annual.

U.S. SALES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
AL	3,555	2,749	3,184	2,274	2,459	2,752	2,835	2,773	3.392	3,283	2,601	3,170
AK	641	715	742	800	863	939	840	913	1,056	1,034	1,043	1,166
AZ	94	117	60	113	40	87	82	113	156	94	723	1,139
AR	379	566	864	750	406	359	495	654	501	1,584	2,887	3,183
CA	81,587	68,949	62,842	66,927	67,614	75,104	70,407	73,420	73,638	65,503	80,467	83,978
CO	2,465	2,497	2,572	2,617	1,961	1,700	1,327	1,529	2,103	1,531	1,572	1,984
CT	14,549	16,019	16,260	19,848	16,776	20,283	25,195	28,433	32,924	36,057	34,564	40,706
DE	4,986	4,775	4,707	4,473	5,317	5,293	3,844	4,357	5,893	6,581	6,194	9,640
DC	1,955	2,243	2,533	3,914	6,504	6,783	8,126	9,138	10,042	11,148	10,748	10,656
FL	32,600	37,044	36,668	39,425	43,093	41,884	38,605	40,543	44,523	55,169	62,414	76,325
GA	5,048	5,285	5,663	7,049	8,106	7,295	8,099	8,725	9,020	10,255	10,488	12,960
HI	6,646	6,716	6,940	7,539	7,673	8,266	8,724	9,730	9,997	10,162	10,631	11,316
ID	422	223	260	433	344	208	137	206	402	276	276	246
IL	25,750	24,756	25,582	21,411	22,220	21,151	23,410	24,136	25,456	28,618	23,708	29,581
IN	11,988	10,736	10,756	11,464	12,601	11,729	11,142	11,550	9,519	9,757	12,194	14,326
IA	1,032	873	931	1,034	513	866	490	441	393	408	411	325
KS	1,433	1,533	1,565	1,127	1,052	1,021	1,252	1,625	1,438	1,247	827	1,974
KY	278	389	460	559	576	696	891	850	1,043	1,061	674	1,159
LA	8,537	6,563	6,653	7,293	7,589	6,716	10,240	10,094	11,509	11,270	8,384	8,667
ME	6,366	5,985	5,332	7,546	6,442	8,077	8,121	8,590	9,467	11,693	18,331	21,365
MD	12,955	13,751	13,270	14,444	15,140	16,178	11,893	12,642	15,321	22,446	30,059	38,273
MA	40,242	41,852	37,693	43,320	53,294	60,234	66,460	68,586	73,572	86,063	82,917	87,930
MI	9,896	9,275	9,746	8,905	8,011	7,634	5,415	5,667	6,704	10,059	11,605	11,388
MN	5,524	6,307	6,102	5,671	4,827	4,740	3,647	3,952	5,165	5,150	4,075	6,943
MS	338	474	878	826	482	334	248	591	688	896	1,074	2,365
MO	2,638	2,131	2,335	2,400	3,252	2,623	3,371	3,379	3,640	3,615	2,904	2,552
MT	2,533	3,049	2,836	2,356	1,195	1,371	1,189	1,495	1,524	1,249	1,236	1,485
NE	419	626	1,133	958	310	382	527	605	731	798	597	706
NV	258	165	180	133	83	61	90	122	105	144	272	242
NH	2,067	2,545	2,524	2,588	2,408	3,911	3,612	2,993	4,434	5,514	6,016	5,961
NJ	42,990	50,422	50,539	50,135	42,445	50,461	63,810	67,583	73,697	80,840	75,213	80,761
NM	311	323	209	146	655	363	111	90	95	215	466	621
NY	83,518	89,667	88,606	84,596	102,974	115,903	128,294	132,907	136,327	152,487	159,609	164,123
NC	4,738	3,725	3,318	3,781	4,583	5,106	5,209	4,759	6,112	6,922	10,433	15,926
ND	552	524	553	678	834	685	536	607	548	726	645	781
OH	9,023	8,227	7,790	9,233	10,558	7,984	6,722	6,045	6,183	6,532	5,259	5,840
OK	873	967	797	825	795	637	776	866	683	744	637	1,355
OR	4,879	4,989	4,930	5,314	4,931	5,617	5,517	6,735	6,796	6,679	6,538	7,977
PA	38,970	41,422	42,245	43,636	42,430	47,160	44,348	47,013	52,489	60,389	59,973	58,490
RI	7,543	8,274	8,177	8,218	6,186	6,204	8,971	8,165	9,147	9,739	10,036	9,811
SC	5,031	5,908	5,833	5,050	3,762	3,971	3,225	3,812	4,138	5,328	5,493	6,395
SD	36	152	245	106	48	67	58	110	181	348	227	335
TN	171	105	275	287	276	331	465	334	786	596	365	523
TX	21,437	18,711	17,485	17,509	13,772	13,360	13,598	13,782	14,110	14,440	12,205	13,751
UT	5,654	6,048	5,790	5,502	5,500	5,738	5,348	5,617	6,030	4,657	5,030	4,538
VT	540	629	607	413	937	1,048	504	547	677	903	898	954
VA	14,195	13,225	14,055	15,516	16,179	14,797	14,925	14,701	22,701	33,236	40,565	44,530
WA	7,545	7,626	7,625	8,807	8,824	9,555	9,370	11,832	11,011	10,368	9,288	11,812
WV	1,216	1,480	1,572	2,297	2,087	2,527	2,117	1,984	1,976	2,064	1,906	1,748
WI	4,028	3,813	4,110	4,145	3,086	3,015	2,242	2,149	2,135	2,927	2,133	2,296
WY	2,555	3,288	2,490	2,241	2,105	1,866	2,733	1,994	2,351	1,482	1,233	1,369
TOT	542,986	548,433	538,522	556,632	574,118	613,972	639,539	669,484	722,629	804,287	838,044	925,647

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

U.S. DELIVERIES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
AL	6,151	10,496	13,220	14,684	16,272	16,443	11,294	8,820	4,686	6,350	3,764	4,150
AK	1,051	1,098	1,104	1,342	1,738	2,595	321	397	249	301	60	67
AZ	4,288	6,943	5,182	4,108	7,478	3,413	5,032	1,046	227	297	616	562
AR	10,720	10,369	9,006	13,071	17,258	16,747	11,813	5,472	2,449	1,803	775	1,045
CA	121,059	105,314	113,782	136,080	180,436	140,595	160,428	162,365	126,463	81,392	62,534	67,319
CO	2,317	3,177	3,591	3,903	3,502	4,091	1,041	1,373	165	14	342	324
CT	43,180	38,546	32,395	32,665	32,183	36,325	27,241	28,209	21,951	21,349	35,676	32,541
DE	13,117	12,632	10,239	11,332	11,524	11,376	11,073	12,889	8,671	6,289	3,627	3,290
DC	11,200	7,437	4,239	3,802	4,989	2,235	767	444	389	1,527	918	857
FL	82,873	75,440	78,885	92,171	85,323	91,175	98,722	96,955	90,347	63,079	35,937	32,561
GA	13,888	13,454	9,831	12,257	12,666	11,988	13,368	8,512	6,251	5,562	5,013	4,489
HI	11,580	11,219	10,776	11,778	12,512	12,796	12,641	13,251	13,311	13,323	14,649	13,623
ID	243	597	703	803	697	1,003	580	460	55	223	113	107
IL	28,795	28,521	26,948	23,659	26,598	30,111	26,675	28,023	21,399	15,507	8,686	7,505
IN	15,536	16,078	14,052	19,188	19,447	19,004	16,271	14,335	7,638	4,856	3,262	2,862
IA	679	628	405	588	764	599	836	360	100	321	208	180
KS	2,847	2,660	5,945	6,416	6,307	6,686	4,830	1,046	697	993	1,832	1,580
KY	1,094	2,084	2,127	2,426	2,706	2,506	1,151	966	1,150	1,197	1,275	1,094
LA	16,952	25,466	28,393	38,317	52,527	54,252	63,359	72,686	55,687	48,260	44,187	49,625
ME	19,860	15,272	10,064	13,116	12,234	11,415	10,738	8,413	10,090	15,803	5,742	5,183
MD	42,534	39,310	25,538	27,330	26,122	28,217	23,851	16,090	12,396	11,898	11,958	10,795
MA	86,282	69,385	66,946	76,380	72,242	72,208	58,958	52,948	49,673	42,762	24,722	22,463
MI	14,560	14,876	18,739	20,656	21,345	24,871	18,547	11,934	8,347	4,285	3,823	3,290
MN	7,069	5,883	4,322	5,796	4,414	4,576	2,695	3,044	1,460	1,732	1,688	1,487
MS	3,955	7,436	9,752	13,881	20,507	23,308	24,740	17,459	9,725	5,570	2,381	2,375
MO	2,959	2,375	2,992	2,948	3,647	3,620	3,196	1,370	656	856	580	500
MT	1,705	2,290	2,186	2,549	2,414	2,665	4,188	3,012	2,519	1,668	1,418	1,349
NE	639	1,045	1,077	1,650	1,189	1,410	622	78	57	198	113	97
NV	612	690	1,456	649	1,455	2,756	1,541	2,503	250	119	90	80
NH	5,382	4,786	4,801	5,949	5,916	5,408	6,109	5,437	4,835	4,106	1,680	1,519
NJ	79,204	64,417	49,222	58,606	60,947	61,726	60,980	53,167	38,279	34,241	52,464	47,312
NM	1,220	1,714	1,632	1,582	1,503	1,081	596	1,305	856	716	3,576	4,823
NY	169,669	155,327	146,837	157,812	157,773	153,037	130,344	112,872	97,868	90,073	73,436	66,754
NC	15,393	13,819	7,786	12,667	14,499	12,814	11,889	9,114	5,677	5,971	6,297	5,680
ND	898	1,190	1,101	1,045	889	950	801	701	1,130	1,171	1,645	1,410
OH	6,866	8,330	9,957	11,041	14,491	13,431	9,674	6,282	5,920	2,488	4,346	3,742
OK	1,629	1,201	752	683	661	987	820	719	745	700	559	479
OR	7,439	6,650	4,484	3,606	3,395	5,087	5,526	4,562	6,407	10,927	4,607	4,893
PA	59,371	57,001	43,997	51,079	60,387	61,366	45,365	34,777	30,340	20,789	21,706	19,687
RI	8,376	6,316	4,600	4,631	4,678	4,088	2,387	2,230	2,227	1,791	1,060	958
SC	9,636	9,777	7,652	11,901	13,570	13,579	11,249	7,127	5,142	2,965	4,260	3,818
SD	234	137	153	299	260	213	166	115	161	51	147	126
TN	650	883	734	3,085	3,404	2,529	2,276	1,472	1,239	748	1,131	969
TX	29,208	36,891	41,072	44,195	52,178	63,634	73,206	73,189	68,671	62,069	45,725	49,104
UT	3,649	4,295	4,698	4,917	4,565	4,441	2,374	2,584	1,064	886	1,736	1,660
VT	876	535	818	1,285	1,136	1,073	337	471	351	372	345	312
VA	46,123	43,274	40,015	40,108	41,171	37,371	34,020	24,704	13,072	9,591	10,068	9,109
WA	10,986	10,365	8,627	7,675	9,683	12,647	13,893	17,332	16,505	14,029	5,358	5,153
WV	1,448	1,709	1,847	4,146	4,039	3,082	1,982	1,465	1,001	1,443	1,190	1,074
WI	2,633	1,787	1,872	2,627	2,759	2,613	1,915	1,751	871	2,212	876	834
WY	1,542	2,091	2,020	2,664	2,527	3,090	2,182	1,630	2,009	1,634	401	380
TOT	1,030,177	963,216	898,572	1,025,148	1,120,927	1,103,233	1,034,610	937,466	762,028	626,510	518,604	501,199

Source: 1973-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1984 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July 1985.

U.S. DELIVERIES OF RESIDUAL FUEL OIL (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1985	1986	1987
Alabama	3,773	9,243	10,910
Alaska	896	5,125	1,363
Arizona	10	29	15
Arkansas	2,545	6,437	2,690
California	59,892	62,987	60,082
Colorado	214	1,040	211
Connecticut	23,414	14,272	20,900
Delaware	1,342	2,195	3,818
Dist. of Col.	509	780	582
Florida	32,515	48,576	36,668
Georgia	8,859	2,229	2,199
Hawaii	13,728	13,307	12,587
Idaho	414	85	390
Illinois	4,899	7,358	7,106
Indiana	4,712	5,201	3,782
Iowa	225	614	126
Kansas	95	571	345
Kentucky	779	893	897
Louisiana	45,953	37,339	43,913
Maine	3,687	9,481	7,451
Maryland	6,562	6,465	7,919
Massachusetts	30,046	47,932	38,772
Michigan	3,298	4,214	3,002
Minnesota	1,225	2,170	1,271
Mississippi	1,466	12,820	2,613
Missouri	920	879	950
Montana	640	201	140
Nebraska	77	241	337
Nevada	39	442	376
New Hampshire	804	5,428	4,481
New Jersey	37,754	36,911	20,639
New Mexico	2,755	1,638	589
New York	50,622	66,353	68,697
North Carolina	4,537	4,160	4,484
North Dakota	635	468	381
Ohio	2,740	2,779	2,162
Oklahoma	264	466	348
Oregon	4,352	5,724	4,348
Pennsylvania	13,153	19,039	18,179
Rhode Island	1,222	2,515	1,917
South Carolina	2,275	1,753	1,676
South Dakota	44	71	57
Tennessee	675	702	337
Texas	43,173	37,177	36,230
Utah	1,951	1,494	2,185
Vermont	88	298	240
Virginia	8,206	8,309	9,490
Washington	8,643	16,489	11,229
West Virginia	702	750	382
Wisconsin	456	1,245	1,242
Wyoming	1,016	803	726
U.S. Total	438,840	517,717	461,504

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly, July issues.

U.S. SALES OF RESIDUAL FUEL OIL BY USES
(Thousands of Barrels)

Year	Vessels Bunkering	Gas and Electrical Public-Utility Power Plants	Railroads	Oil Company Use	Industrial Use (Excluding Oil Companies)	Heating Oils	Military Use	Miscellaneous Uses	All Uses
1947	101,900	60,964	97,500	62,649	115,108	56,402	19,147	6,859	520,529
1948	95,763	56,812	89,588	56,637	117,780	58,639	24,655	6,623	506,497
1949	89,362	80,092	63,467	51,667	122,633	60,414	22,724	4,574	494,933
1950	92,947	93,062	60,878	53,263	148,111	72,716	28,333	4,898	554,208
1951	107,007	70,550	54,998	54,056	157,279	76,164	38,054	5,280	563,388
1952	110,412	70,497	40,489	54,421	158,373	79,151	37,185	5,745	556,273
1953	114,324	85,352	28,477	51,243	166,748	81,824	30,435	6,326	564,729
1954	108,790	70,749	16,122	52,165	160,121	78,845	26,887	7,035	520,714
1955	115,128	75,966	15,018	53,387	173,030	86,282	28,368	9,804	556,983
1956	117,445	73,962	10,575	53,271	177,807	87,601	30,546	10,331	561,538
1957	123,651	75,950	6,953	50,153	166,885	81,412	28,962	9,984	543,950
1958	106,269	76,995	5,772	46,463	143,142	105,639	37,428	9,659	531,367
1959(1)	102,049	82,208	5,613	46,177	167,701	111,850	31,415	7,339	554,352
1960(2)	94,084	85,408	5,610	45,061	157,270	125,088	31,724	6,291	550,536
1961	87,308	87,881	5,347	44,399	153,766	121,097	36,762	6,426	542,986
1962	84,415	88,261	5,501	45,978	156,221	125,164	35,667	7,226	548,433
1963	76,502	91,615	5,342	46,976	149,269	125,248	36,444	7,126	538,522
1964	83,024	97,595	5,350	43,098	157,176	126,215	35,568	8,606	556,632

(1) Includes Alaska
(2) Includes Hawaii

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annuals

U.S. DELIVERIES OF RESIDUAL FUEL OIL BY USES
(Thousands of Barrels)

Year	Vessels Bunkering	Gas and Electrical Public-Utility Power Plants(1)	Railroads	Oil Company Use	Industrial Use (Excluding Oil Companies)	Heating Oils(3)	Military Use(2)	Miscel-laneous Uses	All Uses
1965	73,639	114,884	4,001	34,354	140,602	156,254	40,380	10,004	574,118
1966	63,641	140,642	3,792	35,177	141,050	167,471	41,861	10,338	613,972
1967	80,680	158,417	5,494	37,880	131,819	175,990	40,465	8,794	639,539
1968	87,575	184,956	4,296	39,329	135,664	174,326	34,990	8,348	669,484
1969	85,581	247,634	3,381	36,559	130,654	178,095	31,750	8,875	722,529
1970	89,850	312,420	2,222	38,318	139,647	185,831	28,704	7,295	804,287
1971	78,727	371,820	1,262	32,626	136,221	182,062	29,217	6,109	838,044
1972	77,932	435,348	1,137	44,291	142,320	191,111	24,622	8,886	925,647
1973	92,415	509,457	1,214	50,652	152,267	192,252	22,892	9,028	1,030,177
1974	91,052	475,204	1,176	50,236	143,726	172,896	20,423	8,503	963,216
1975	96,673	454,935	583	50,487	116,657	154,103	19,068	6,066	898,572
1976	117,458	492,974	423	58,212	153,596	178,139	18,561	5,785	1,025,148
1977	128,966	569,429	329	60,582	171,967	168,279	16,646	4,729	1,120,927
1978	157,495	533,193	206	57,690	169,403	164,536	16,583	4,127	1,103,233
1979	190,543	486,636	245	51,062	198,759	82,729(3)	7,736	16,900	1,034,610
1980	213,131	390,105	665	59,519	163,564	98,034	8,066	4,382	937,466
1981	188,632	325,486	178	51,870	117,024	67,035	7,008	4,795	762,030
1982	152,586	227,419	170	45,319	122,619	65,781	7,829	4,784	626,510
1983	136,290	204,238	47	28,604	93,624	35,979	5,411	14,412	518,604
1984	135,408	186,318	43	27,680	94,375	33,777	5,291	18,307	501,199
1985	130,323	147,238	148	18,477	95,509	31,592	4,593	10,962	438,840
1986	125,889	215,276	14	18,239	106,962	39,595	4,308	7,434	517,717
1987	125,221	181,712	7	11,967	90,723	42,013	4,549	5,314	461,504

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(1) Beginning with 1967, represented use by electric public-utility plants only.
(2) Includes imports by military.
(3) Beginning in 1979, heating oil has been reclassified commercial and is a part of the total called "heating and industrial."

Source: 1965-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1987 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

Section VII
Table 13

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--NAPHTHA TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand (2)
1965(1)	226	44	270	8,338	--	270	2	268
1966	245	35	280	7,235	-3	283	4	279
1967	300	15	315	9,037	+5	310	5	305
1968	332	19	351	8,904	--	351	5	346
1969	287	14	301	8,556	-1	302	5	297
1970	320	20	250	6,621	-5	255	6	249
1971	234	30	264	6,990	+1	263	3	260
1972	209	33	242	6,147	-2	244	2	242
1973	181	36	217	5,599	-2	219	2	217
1974	195	27	222	5,529	--	222	--	222
1975	180	28	208	5,222	-1	209	--	209
1976	187	15	202	6,495	+3	199	--	199
1977	186	21	207	6,285	-1	208	--	208
1978	179	19	198	5,958	-1	199	--	199
1979	176	22	198	5,599	-1	200	--	200
1980	188	31	219	6,308	+2	217	--	217
1981	193	7	200	7,054	+2	198	1	198
1982	201	5	206	5,667	-4	210	1	209
1983	205	1	206	6,265	-2	208	1	207
1984	213	14	227	6,861	+2	225	3	223
1985	206	9	215	6,654	-1	216	1	214
Jan.	185	19	204	6,415	-14	218	1	218
Feb.	195	9	204	6,183	-8	212	0	212
Mar.	189	17	206	6,767	+19	187	0	187
Apr.	222	3	225	6,205	-19	244	0	244
May	230	6	236	6,428	+7	229	0	228
Jun.	211	15	226	6,227	-7	233	0	232
Jul.	224	8	232	6,977	+24	208	0	207
Aug.	209	3	212	6,982	--	212	2	211
Sep.	206	0	206	6,857	-4	210	2	208
Oct.	203	13	216	6,738	-4	220	3	217
Nov.	209	9	218	6,793	+2	216	6	211
Dec.	189	2	191	6,654	-4	195	3	192

(1) Data prior to 1965 ar not available on a comparable basis.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1985 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 13a

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--NAPHTHA TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand(2)
1986	196	9	205	7,072	+1	204	1	202
Jan.	193	2	195	6,534	-4	199	0	200
Feb.	173	2	175	6,264	-10	185	1	183
Mar.	172	5	177	5,795	-15	192	1	191
Apr.	201	5	206	6,712	+31	175	5	171
May	197	15	212	6,513	-6	218	0	218
Jun.	209	9	218	6,581	+2	216	0	215
Jul.	203	16	219	6,099	-16	235	0	235
Aug.	197	8	205	6,609	+16	189	1	188
Sep.	197	6	203	6,700	+3	200	0	199
Oct.	202	7	209	6,764	+2	207	0	207
Nov.	202	11	213	6,901	+5	208	0	209
Dec.	203	21	224	7,072	+6	218	10	209
1987	204	3	207	7,956	+2	205	1	204
Jan.	174	6	180	7,631	+18	162	2	159
Feb.	194	3	197	7,141	-18	214	0	214
Mar.	187	6	193	7,031	-4	197	1	196
Apr.	202	3	205	7,183	+5	200	0	199
May	216	2	218	8,078	+29	189	0	189
Jun.	204	2	206	7,262	-27	233	0	233
Jul.	221	3	224	7,253	--	224	0	224
Aug.	208	3	211	6,981	-9	220	2	218
Sep.	204	2	206	6,506	-16	222	1	221
Oct.	219	4	223	7,097	+ 1	203	0	203
Nov.	217	4	221	7,043	- 2	223	2	221
Dec.	206	2	208	7,956	+29	179	4	175
1988	206	3	209	6,051	- 5	214	1	213
Jan.	184	3	187	8,366	+13	173	0	173
Feb.	178	3	181	6,731	-56	237	0	237
Mar.	209	2	211	7,156	+14	197	0	197
Apr.	203	3	206	6,713	-15	221	0	221
May	229	4	233	7,397	+22	211	3	208
Jun.	208	3	211	6,750	-22	233	0	233
Jul.	209	3	212	6,710	- 1	213	0	213
Aug.	206	3	209	6,861	+ 5	205	1	204
Sep.	198	3	201	6,492	-12	213	7	206
Oct.	208	3	211	6,316	- 6	216	2	214
Nov.	219	3	222	6,436	+ 4	218	0	218
Dec.	217	3	220	6,051	-12	233	3	230

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--KEROSINE TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1965(1)	298	37	335	10,361	--	335	1	334
1966	345	52	397	13,139	+ 5	392	1	391
1967	448	74	522	13,174	+ 3	519	1	518
1968	529	86	615	15,373	+ 6	609	--	609
1969	594	111	705	19,517	+11	694	--	694
1970	597	125	722	29,989	+ 4	718	--	718
1971	601	150	751	20,747	- 1	752	1	751
1972	638	162	800	19,346	- 3	803	--	803
1973	679	176	855	22,945	+10	845	3	842
1974	641	135	776	23,906	+ 3	773	2	771
1975	691	105	796	25,158	+ 3	793	2	791
1976	731	61	792	25,590	+ 1	791	2	789
1977	788	53	841	28,263	+ 8	833	2	831
1978	791	67	858	27,707	- 1	859	1	858
1979	835	56	891	32,921	+14	877	1	876
1980	811	49	860	35,723	+ 8	852	1	851
1981	775	31	806	34,011	- 5	811	1	809
1982	778	23	801	31,180	- 8	809	5	804
1983	817	29	846	32,346	+ 2	844	5	839
1984	919	48	967	35,118	+ 8	959	7	953
Jan.	870	51	921	29,234	-100	1,021	10	1,011
Feb.	938	110	1,048	32,929	+127	921	2	919
Mar.	893	38	931	33,917	+32	899	1	898
Apr.	871	42	913	34,056	+5	908	5	903
May	890	29	919	34,488	+14	905	1	905
Jun.	916	36	952	36,089	+52	899	6	892
Jul.	948	40	988	36,780	+22	966	10	956
Aug.	973	77	1,050	38,526	+56	994	2	992
Sep.	926	33	959	37,989	-18	977	1	977
Oct.	958	56	1,014	38,214	+7	1,007	5	1,002
Nov.	920	22	942	38,401	+6	936	11	924
Dec.	931	38	969	35,118	-106	1,075	24	1,051
1985	983	30	1,013	33,825	-4	1,017	12	1,005
Jan.	958	49	1,007	34,691	-14	1,021	3	1,018
Feb.	981	29	1,010	35,302	+22	988	22	966
Mar.	1,003	30	1,033	36,865	+50	983	6	976
Apr.	937	14	951	35,041	-61	1,012	5	1,007
May	915	24	939	35,924	+28	911	5	906
Jun.	914	20	934	36,537	+20	914	3	910
Jul.	954	43	997	36,037	-16	1,013	3	1,009
Aug.	966	9	975	34,681	-44	1,019	21	998
Sep.	989	34	1,023	35,187	+17	1,006	4	1,002
Oct.	1,036	42	1,078	35,558	+12	1,066	25	1,042
Nov.	1,090	32	1,122	36,408	+28	1,094	28	1,066
Dec.	1,051	35	1,086	33,825	-83	1,169	18	1,152

(1) Data prior to 1965 are not available on a comparable basis.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1985 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 14a

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--KEROSINE TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1986	1,097	48	1,145	42,677	+24	1,121	16	1,105
Jan.	1,143	25	1,168	35,051	+40	1,128	38	1,090
Feb.	1,175	33	1,208	37,829	+99	1,109	15	1,093
Mar.	1,119	24	1,143	41,729	+126	1,017	11	1,007
Apr.	963	39	1,002	38,831	-97	1,099	12	1,086
May	1,004	39	1,043	38,807	-1	1,044	14	1,030
Jun.	1,066	76	1,142	39,703	+30	1,112	6	1,106
Jul.	1,084	106	1,190	42,481	+90	1,100	10	1,091
Aug.	1,072	77	1,149	41,884	-19	1,168	4	1,164
Sep.	1,093	54	1,147	42,233	+12	1,135	14	1,122
Oct.	1,112	31	1,143	43,853	+52	1,091	25	1,066
Nov.	1,125	48	1,173	43,237	-21	1,194	22	1,171
Dec.	1,210	28	1,238	42,677	-18	1,256	20	1,236
1987	1,138	64	1,202	41,973	-2	1,204	23	1,181
Jan.	1,192	37	1,229	42,116	-18	1,247	45	1,202
Feb.	1,135	64	1,199	41,154	-34	1,233	20	1,213
Mar.	1,095	77	1,172	41,044	-4	1,176	7	1,169
Apr.	1,052	62	1,114	39,977	-36	1,150	4	1,146
May	1,035	65	1,100	39,277	-23	1,123	4	1,118
Jun.	1,048	64	1,112	38,677	-20	1,132	5	1,127
Jul.	1,126	70	1,196	39,479	+26	1,170	4	1,165
Aug.	1,191	52	1,243	40,762	+41	1,202	2	1,199
Sep.	1,190	81	1,271	43,684	+97	1,174	34	1,139
Oct.	1,189	79	1,268	42,740	-30	1,298	35	1,264
Nov.	1,171	51	1,222	43,937	+40	1,182	45	1,138
Dec.	1,233	65	1,298	41,973	-63	1,361	74	1,288
1988	1,164	85	1,249	37,677	- 12	1,261	27	1,234
Jan.	1,231	80	1,310	37,912	-131	1,441	81	1,360
Feb.	1,205	64	1,269	36,889	-35	1,304	34	1,270
Mar.	1,243	95	1,338	39,548	+86	1,252	52	1,200
Apr.	1,088	83	1,171	39,270	-9	1,180	13	1,167
May	1,060	101	1,161	39,392	+4	1,157	4	1,153
Jun.	1,133	71	1,204	38,990	-13	1,217	15	1,202
Jul.	1,155	78	1,233	40,297	+42	1,190	3	1,187
Aug.	1,138	100	1,238	39,971	-11	1,248	14	1,234
Sep.	1,178	59	1,237	40,317	+12	1,225	9	1,216
Oct.	1,158	136	1,294	41,032	+23	1,271	2	1,269
Nov.	1,118	76	1,194	40,018	-34	1,228	9	1,219
Dec.	1,259	71	1,330	37,677	-76	1,406	80	1,326

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals and Monthlies.

Section VII
Table 15

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	302	--	302	17,722	+ 1	301	20	281
1948	333	--	333	23,941	+17	316	9	307
1949	280	--	280	20,888	- 8	288	7	281
1950	325	--	325	19,723	- 3	328	5	323
1951	372	--	372	27,088	+16	356	19	337
1952	351	--	351	26,529	- 1	352	21	331
1953	337	--	337	28,684	+ 4	333	19	314
1954	335	--	335	27,826	- 2	337	13	324
1955	326	--	326	26,770	- 3	329	9	320
1956	342	--	342	31,420	+12	330	9	321
1957	303	--	303	29,200	- 6	309	14	295
1958	305	--	305	26,040	- 8	313	3	310
1959(1)	305	--	305	26,856	+ 1	304	3	301
1960(2)	374	--	374	31,445	+10	364	2	362
1961	391	8	399	32,433	+ 3	396	1	395
1962	431	18	449	31,725	- 2	451	1	450
1963	454	24	478	34,102	+ 4	474	2	472
1964	463	31	494	36,165	+ 6	488	--	488
1965(3)	259	--	259	24,080	- 9	268	1	267
1966	279	1	280	25,004	+ 2	278	1	277
1967(4)	274	--	274	25,366	--	274	--	274
1968	278	--	278	23,480	- 5	283	2	281
1969	282	3	285	26,780	+ 9	276	1	275
1970	262	4	266	27,848	+ 3	263	--	263
1971	240	1	241	24,438	- 9	250	1	249
1972	219	1	220	19,111	-16	236	--	236
1973	220	2	222	21,022	+ 6	216	--	216
1974	156	5	161	15,269	-15	176	--	176

(1) These figures and those for subsequent years are on a 50 state basis.
(2) These figures and those through 1964 include commercial jet fuel.
(3) These figures and those for subsequent years exclude kerosine-type jet fuel.
(4) Beginning with 1967 production at refineries and at plants are combined in one total.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 15a

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1975	152	3	155	15,571	- 4	159	--	159
1976	152	9	161	12,514	- 8	169	--	169
1977	171	19	190	18,056	+15	175	--	175
1978	154	11	165	14,330	-10	175	--	175
1979	183	9	192	15,824	+ 4	189	--	189
1980	137	10	147	11,570	-12	159	--	159
1981	119	7	126	11,042	- 1	127	--	127
1982	115	13	128	10,420	- 2	130	1	129
1983	110	11	121	7,861	- 8	129	1	127
1984	114	12	126	11,893	+11	115	--	115
1985	94	8	102	7,502	-12	114	--	114
Jan.	100	10	110	7,905	-129	239	--	239
Feb.	135	12	147	7,124	-28	175	--	175
Mar.	97	4	101	8,095	+31	70	--	70
Apr.	69	0	69	7,926	-6	75	--	74
May	43	2	45	7,326	-19	64	--	64
Jun.	59	5	64	6,794	-18	82	--	81
Jul.	77	1	78	7,596	+26	52	--	52
Aug.	91	9	100	7,951	+11	89	--	89
Sep.	102	0	102	8,701	+25	77	--	76
Oct.	117	11	128	9,648	+31	97	--	97
Nov.	115	16	131	10,489	+28	103	1	102
Dec.	131	23	154	7,502	-96	250	--	250
1986	89	13	102	8,379	+2	100	2	98
Jan.	135	29	164	7,272	-7	171	1	170
Feb.	120	1	121	6,735	-19	140	--	140
Mar.	96	11	107	6,179	-18	126	--	125
Apr.	76	0	76	6,837	+22	54	1	54
May	47	2	49	6,258	-19	68	0	68
Jun.	45	0	45	6,652	+13	32	1	30
Jul.	62	7	69	6,881	+7	62	0	62
Aug.	73	26	99	6,859	-1	100	0	99
Sep.	91	16	107	8,344	+50	57	1	57
Oct.	91	14	105	8,277	-2	103	8	100
Nov.	107	19	126	8,502	+8	118	0	118
Dec.	131	30	161	8,379	-4	165	8	157

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1986 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 15b

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1987	79	17	96	8,447	--	96	1	95
Jan.	128	33	161	8,515	+4	157	0	157
Feb.	79	36	115	7,578	-33	148	0	148
Mar.	61	9	70	6,523	-34	104	0	105
Apr.	46	9	55	6,851	+11	44	0	43
May	38	3	41	6,617	-8	49	0	48
Jun.	38	4	42	6,089	-18	60	0	60
Jul.	53	12	65	6,512	+14	51	0	51
Aug.	66	18	84	7,055	+18	66	1	65
Sep.	90	13	103	7,989	+31	72	0	72
Oct.	118	30	148	8,719	+24	125	0	125
Nov.	117	12	129	9,270	+18	111	1	110
Dec.	107	29	136	8,447	-27	163	10	153
1988	79	15	94	7,283	- 3	97	1	96
Jan.	104	32	136	7,182	-41	176	0	176
Feb.	118	20	138	6,931	-9	146	4	142
Mar.	68	68	82	6,350	-19	101	1	101
Apr.	50	8	58	5,980	-12	69	0	69
May	48	2	50	5,597	-12	62	0	62
Jun.	55	9	64	5,963	+12	51	0	51
Jul.	64	0	64	6,710	+8	57	0	57
Aug.	81	8	89	7,131	+30	58	0	58
Sep.	78	13	91	7,468	+11	80	1	79
Oct.	80	28	108	8,006	+17	90	2	88
Nov.	99	18	117	8,115	+ 4	113	2	111
Dec.	99	29	128	7,283	-27	155	2	153

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(1) Total may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 16

U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports(1)	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	413	--	413	4,295	- 2	415	17	398
1948	464	--	464	6,172	+ 3	461	14	447
1949	494	--	494	7,358	+ 2	491	15	476
1950	578	--	578	8,012	+ 2	576	7	569
1951	651	--	651	8,854	+ 2	649	10	639
1952	695	--	695	8,445	- 1	696	11	685
1953	745	--	745	11,220	+ 8	737	11	726
1954	785	--	785	14,979	+11	774	12	762
1955	890	--	890	14,596	- 1	891	12	879
1956	942	--	942	21,952	+20	922	12	910
1957	954	--	954	23,480	+ 4	950	13	937
1958	965	--	965	24,959	+ 8	957	8	949
1959(2)	1,067	--	1,067	27,407	+ 7	1,060	5	1,055
1960	1,141	5	1,146	32,554	+14	1,132	8	1,124
1961	1,207	5	1,212	43,365	+29	1,183	10	1,173
1962	1,232	6	1,238	36,154	-20	1,258	11	1,247
1963	1,359	7	1,366	37,633	+ 4	1,362	12	1,350
1964	1,446	11	1,457	39,371	+ 5	1,452	15	1,437
1965	1,502	21	1,523	39,542	--	1,523	22	1,501
1966	1,575	29	1,604	43,759	+12	1,592	24	1,568
1967	1,715	27	1,742	69,947	+74	1,668	25	1,643
1968	1,826	32	1,858	81,086	+32	1,826	29	1,797
1969	1,928	35	1,963	65,306	-45	2,008	35	1,973
1970	2,005	52	2,057	74,089	+25	2,032	27	2,005
1971	2,050	106	2,156	100,889	+73	2,083	26	2,057
1972	2,100	174	2,274	91,792	-25	2,299	31	2,268
1973	2,113	239	2,352	106,476	+41	2,311	27	2,284
1974	2,026	211	2,237	120,092	+37	2,200	25	2,175

(1) Prior to 1960 figures included with gasoline.
(2) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

TOTAL U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand(3)
1975	1,944	185	2,129	132,653	+34	2,095	26	2,069
1976	1,944	197	2,141	124,518	-22	2,163	25	2,138
1977	1,970	203	2,173	144,902	+56	2,117	18	2,099
1978	1,921	139	2,060	140,052	-42	2,101	20	2,081
1979	1,924	230	2,154	125,289	-40	2,187	15	2,172
1980	1,897	216	2,113	137,551	+34	2,079	21	2,058
1981	1,905	254	2,159	150,170	+11(1)	2,148	42	2,106
1982	1,809	247	2,056	105,077	-124	2,180	65	2,115
1983	1,875	205	2,080	116,532	+470	1,610	73	1,537
1984	1,989	241	2,230	108,446	- 22	1,752	51	1,702
1985	1,986	235	2,221	81,707	-73	1,785	64	1,721
Jan.	1,948	284	2,232	96,294	-424	2,127	72	2,055
Feb.	1,967	253	2,220	86,644	-309	2,005	74	1,931
Mar.	1,956	269	2,225	86,001	+21	1,752	52	1,700
Apr.	1,976	172	2,148	90,221	+141	1,538	80	1,458
May	1,995	221	2,216	96,365	+198	1,562	40	1,522
Jun.	2,016	250	2,266	101,922	+185	1,617	53	1,564
Jul.	2,001	190	2,191	105,910	+129	1,607	70	1,537
Aug.	2,000	182	2,182	108,896	+96	1,594	82	1,512
Sep.	1,954	188	2,142	106,667	-74	1,691	29	1,662
Oct.	1,950	271	2,221	97,102	-309	1,970	47	1,923
Nov.	2,001	220	2,221	91,816	-176	1,802	93	1,709
Dec.	2,063	322	2,385	81,707	-326	2,165	77	2,088
1986	1,963	265	2,228	109,532	+76	1,673	45	1,629
Jan.	2,128	303	2,431	78,770	-95	1,995	47	1,948
Feb.	2,094	224	2,318	76,170	-93	1,915	80	1,834
Mar.	1,965	220	2,185	78,231	+66	1,689	51	1,638
Apr.	1,904	156	2,060	84,220	+200	1,418	36	1,383
May	1,962	221	2,183	95,798	+373	1,362	43	1,320
Jun.	1,919	302	2,221	111,458	+522	1,296	25	1,271
Jul.	1,961	315	2,276	126,110	+473	1,435	53	1,382
Aug.	1,889	281	2,170	134,938	+285	1,458	56	1,402
Sep.	1,901	314	2,215	138,796	+129	1,609	29	1,581
Oct.	1,888	276	2,164	131,785	-226	1,889	26	1,864
Nov.	1,985	322	2,307	122,639	-305	2,018	58	1,958
Dec.	1,976	238	2,214	109,532	-423	2,008	35	1,972

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(1) The U.S. Department of Energy altered its stock reporting base as of January 1981. On the new basis, year-end 1980 stocks were 146,145 thousand barrels. This figure was used to compute the 1981 stock change.

(2) Total demand excludes volume used as refinery inputs.

(3) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 16b

TOTAL U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(2)
1987	2,040	201	2,241	104,119	-15	1,789	40	1,749
Jan.	2,014	203	2,217	94,979	-502	2,143	46	2,097
Feb.	2,035	215	2,250	88,728	-188	1,948	40	1,908
Mar.	2,037	145	2,182	88,569	-5	1,756	54	1,701
Apr.	2,049	170	2,219	92,705	+138	1,658	39	1,619
May	2,023	147	2,170	101,897	+297	1,444	36	1,408
Jun.	2,035	131	2,166	107,974	+203	1,559	22	1,537
Jul.	2,070	201	2,271	112,761	+154	1,693	32	1,661
Aug.	2,020	199	2,219	120,211	+240	1,548	35	1,513
Sep.	2,034	289	2,323	122,768	+ 85	1,812	58	1,754
Oct.	2,040	241	2,281	120,373	- 77	1,889	23	1,866
Nov.	2,067	243	2,310	116,176	-140	1,927	37	1,890
Dec.	2,051	227	2,278	104,119	-389	2,106	59	2,047
1988	2,112	220	2,332	105,654	+4	1,870	57	1,819
Jan.	2,018	237	2,255	87,872	-526	2,266	47	2,219
Feb.	2,052	263	2,315	77,044	-373	2,191	49	2,142
Mar.	2,106	176	2,282	76,427	-20	1,871	38	1,833
Apr.	2,093	216	2,309	88,265	+395	1,512	45	1,467
May	2,111	174	2,285	98,676	+336	1,537	39	1,498
Jun.	2,108	152	2,260	109,377	+357	1,512	40	1,472
Jul.	2,141	234	2,375	121,667	+396	1,591	37	1,554
Aug.	2,165	261	2,426	130,481	+284	1,719	52	1,667
Sep.	2,145	200	2,345	131,694	+40	1,904	45	1,859
Oct.	2,173	227	2,400	129,158	-82	2,029	58	1,971
Nov.	2,131	279	2,410	122,943	-207	2,023	75	1,948
Dec.	2,101	225	2,326	105,654	-598	2,286	87	2,199

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(1) Total demand excludes volume used as refinery inputs.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	141	--	141	8,624	+ 2	139	41	98
1948	140	--	140	9,843	+ 5	135	37	98
1949	124	--	124	9,219	- 2	126	35	91
1950	141	--	141	7,849	- 4	145	39	106
1951	168	--	168	9,617	+ 4	164	48	116
1952	151	--	151	11,021	+ 3	148	44	104
1953	144	--	144	10,070	- 2	146	35	111
1954	145	--	145	9,702	- 1	146	41	105
1955	153	--	153	8,763	- 3	156	39	117
1956	161	--	161	10,183	+ 3	158	38	120
1957	152	--	152	10,864	+ 1	151	38	113
1958	140	--	140	9,687	- 3	143	35	108
1959(1)	154	--	154	8,950	- 2	156	38	118
1960	162	--	162	9,874	+ 2	160	43	117
1961	162	--	162	12,943	+ 2	160	47	113
1962	168	--	168	13,130	--	168	48	120
1963	173	--	173	14,321	+ 3	170	50	120
1964	174	--	174	14,062	- 1	175	50	125
1965	172	--	172	13,304	- 2	174	45	129
1966	179	--	179	12,682	- 2	181	47	134
1967	178	--	178	14,774	+ 6	172	51	121
1968	180	--	180	14,023	- 2	182	49	133
1969	178	1	179	14,088	--	179	45	134
1970	181	1	182	14,712	+ 2	180	44	136
1971	179	--	179	15,049	+ 1	178	43	135
1972	179	1	180	13,271	- 5	185	41	144
1973	188	6	194	12,186	- 3	197	35	162
1974	194	5	199	16,060	+11	188	33	155

(1) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1975	154	3	157	14,337	-5	162	25	137
1976	169	4	173	12,274	-5	178	26	152
1977	177	9	186	12,095	0	186	26	160
1978	190	8	198	12,233	-	198	27	171
1979	194	9	203	12,549	+1	202	23	179
1980	178	7	185	13,483	+3	182	23	160
1981	166	8	174	14,304	+2	172	19	153
1982	141	10	151	12,531	-5	156	16	140
1983	147	11	158	12,080	-3	162	16	146
1984	159	13	172	12,724	+2	170	15	156
1985	145	13	158	11,827	-2	160	15	145
Jan.	145	12	157	12,931	+7	150	14	136
Feb.	149	18	167	12,700	-8	175	12	163
Mar.	147	11	158	12,462	-8	166	16	151
Apr.	149	9	158	11,937	-18	176	13	162
May	153	20	173	11,938	+2	173	14	159
Jun.	156	14	170	12,203	+9	161	9	151
Jul.	149	10	159	12,469	+9	150	13	138
Aug.	152	16	168	12,220	-8	176	17	160
Sep.	154	6	160	12,456	+8	152	15	138
Oct.	150	15	165	12,165	-9	174	20	154
Nov.	114	12	126	11,556	-20	146	21	125
Dec.	126	9	135	11,827	+9	126	17	109
1986	159	12	171	14,164	+6	165	23	142
Jan.	161	16	177	14,431	+84	93	19	74
Feb.	168	11	179	14,916	+17	162	20	141
Mar.	145	12	157	14,029	-29	186	21	165
Apr.	162	19	181	14,060	+1	180	21	159
May	173	14	187	13,982	-3	190	21	169
Jun.	160	9	169	13,586	-13	182	17	166
Jul.	145	14	159	13,255	-11	170	27	142
Aug.	161	5	166	13,279	+1	165	23	141
Sep.	163	10	173	13,015	-9	182	21	161
Oct.	154	14	168	12,511	-16	184	30	154
Nov.	167	14	181	13,282	+26	155	25	130
Dec.	155	4	159	14,164	+28	131	25	126

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1986 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 17b

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1987	167	14	181	13,271	- 2	184	23	161
Jan.	163	13	176	14,249	+3	173	17	156
Feb.	158	16	174	13,691	-20	194	25	168
Mar.	161	12	173	12,953	-24	197	24	173
Apr.	172	14	186	12,455	-17	203	22	180
May	159	9	168	12,122	-11	180	25	154
Jun.	176	17	193	11,675	-15	208	24	184
Jul.	171	23	194	11,705	+1	193	28	165
Aug.	168	13	181	11,900	+ 6	175	22	153
Sep.	171	16	187	12,169	+9	178	21	157
Oct.	173	12	185	12,620	+15	170	21	150
Nov.	173	14	187	13,648	+34	153	22	130
Dec.	156	13	169	13,271	-12	181	22	160
1988	171	10	181	13,298	-	181	25	156
Jan.	167	11	178	14,076	+24	154	18	136
Feb.	174	12	186	13,882	-7	193	20	173
Mar.	189	13	202	13,872	-	202	24	178
Apr.	178	12	190	14,067	+7	183	32	151
May	181	12	193	13,847	-7	201	24	177
Jun.	182	6	188	13,897	+2	187	33	154
Jul.	169	10	179	14,023	+4	174	24	150
Aug.	170	2	172	13,638	-12	185	25	160
Sep.	144	11	155	12,515	-37	192	28	164
Oct.	168	11	179	12,757	+ 8	171	17	154
Nov.	165	8	173	12,508	- 8	182	21	161
Dec.	161	10	171	13,298	+25	146	29	117

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 18

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1984

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	526	67	593	20,378	+3	596	5	588
Propane (1)	807	67	874	57,803	-7	867	30	833
Normal Butane (1)	265	37	302	13,681	+18	320	10	143
Isobutane (1)	99	24	123	8,987	+5	128	3	7
Total LPG's (1)	1,697	195	1,892	100,849	+19	1,911	48	1,572
Pentanes Plus (1)	292	46	338	7,597	+3	341	3	129
Total NGL's & LRG's (1)	1,989	241	2,230	108,446	+22	2,252	51	1,702
Petrochemicals	351	33	384	3,347	--	384	21	364
Lubricants	159	13	172	12,724	-2	170	15	156
Asphalt & Road Oil	386	18	404	17,183	+4	408	1	408
Petroleum Coke	439	0	439	4,839	+2	441	193	247
Miscellaneous Products	711	66	777	8,477	-1	776	4	773
Total Other Oils (1)	4,035	371	4,406	155,016	+25	4,431	285	3,650

1985

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	507	48	555	11.765	+24	579	3	573
Propane (1)	813	67	880	39,474	+50	930	48	880
Normal Butane (1)	276	43	319	14,157	-1	318	9	153
Isobutane (1)	109	29	130	7,313	+5	135	2	8
Total LPG's (1)	1,704	187	1,891	72,709	+77	1,968	62	1,614
Pentane Plus (1)	289	51	340	8,189	-2	338	2	135
Total NGL's & LRG's (1)	1,992	239	2,231	80,898	+76	2m307	64	1,749
Petrochemicals	357	23	380	3,116	+1	381	19	361
Lubricants	145	11	156	11,657	+3	159	15	144
Asphalt & Road Oil	398	33	431	21,207	-11	420	0	420
Petroleum Coke	453	0	453	6,159	-4	449	187	262
Miscellaneous Products	737	38	775	8,620	--	775	3	773
Total Other Oils (1)	4,082	344	4,426	131,657	+65	4,491	288	3,709

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(1) The discrepancy between total demand minus exports equals domestic demand is accounted for by refinery inputs, which are not shown here.

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1984 and Petroleum Supply Monthly December for 1985

Section VII
Table 18a

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1986

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	493	19	512	15,421	+10	502	5	495
Propane (1)	817	110	927	62,852	+64	866	28	831
Normal Butane (1)	253	68	321	15,859	+2	321	7	146
Isobutane (1)	133	45	178	8,526	+3	175	2	41
Total LPG's (1)	1,694	242	1,936	102,658	+80	1,856	42	1,512
Pentanes Plus (1)	269	23	292	6,874	-4	296	2	116
Total NGL's & LRG's (1)	1,963	265	2,228	109,532	+76	2,152	45	1,629
Petrochemicals	404	85	489	3,986	+3	486	18	465
Lubricants	159	12	171	14,164	+6	165	23	142
Asphalt & Road Oil	410	29	439	17,707	-10	449	1	448
Petroleum Coke	506	0	506	6,030	--	506	238	268
Miscellaneous Products(3)	776	20	796	7,720	+5	791	3	789
Total Other Oils (1)	4,218	391	4,609	159,539	+80	4,549	327	3,741

1987

	Production	Imports	New Supply	Stocks as of December 31(mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane(1)	509	3	512	22,261	+19	493	4	486
Propane(1)	828	88	916	47,792	-41	957	24	924
Normal Butane(1)	260	60	320	16,542	+2	318	8	151
Isobutane(1)	152	40	192	10,499	+5	187	2	50
Total LPG's(1)	1,749	190	1,939	97,094	-15	1,954	38	1,612
Pentanes Plus(1)	291	11	302	7,025	--	302	2	138
Total NGL's & LRG's(1)	2,040	201	2,241	104,119	-15	2,256	40	1,749
Petrochemicals	384	79	463	3,938	-1	463	20	443
Lubricants	167	14	181	13,271	-2	184	23	161
Asphalt & Road Oil	434	36	470	18,799	+3	468	1	467
Petroleum Coke	512	1	513	6,750	+2	512	213	299
Miscellaneous Products	783	23	806	8,278	+2	805	5	800
Total Other Oils(1)	4,320	354	4,674	155,155	-11	4,688	302	3,919

(1) The discrepancy between total demand minus exports equals domestic demand is accounted for by refinery inputs, which are not shown here.
(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.

Section VII
Table 18b

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1988

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	509	3	512	18,023	-12	524	4	518
Propane (1)	860	106	966	50,390	+7	958	51	919
Normal Butane (1)	284	64	348	21,446	+13	334	11	176
Isobutane (1)	156	36	192	9,026	-4	196	2	53
Total LPG's (1)	1,810	209	2,019	98,885	+5	2,014	49	1,666
Pentanes Plus (1)	302	11	313	6,769	-1	313	2	152
Total NGL's & LRG's (1)	2,112	220	2,332	105,654	+4	2,329	51	1,819
Petrochemicals	343	80	423	3,773	-1	424	23	401
Lubricants	171	10	181	13,298	0	181	25	156
Asphalt & Road Oil	443	30	473	20,817	+6	468	1	467
Petroleum Coke	543	1	544	7,790	+3	552	231	311
Miscellaneous Products(3)	832	15	847	7,522	-2	849	11	838
Total Other Oils (1)	4,444	356	4,800	158,854	+10	4,793	243	3,992

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(1) The discrepancy between total demand minus exports equals domestic demand is accounted for by refinery inputs, which are not shown here.

(2) Totals may not add due to independent rounding.

(3) Miscellaneous Products include special naphtha, waxes, still gas and miscellaneous products.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthly, December 1988.

Section VII
Table 19

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks	Year's High		Year's Low		Strategic Petroleum Reserve Stocks
		Date	Stocks	Date	Stocks	
1960	239,800	Apr. 30	266,178	Sept. 30	231,966	
1961	244,644	May 31	261,440	Feb. 28	232,063	
1962	252,011	Nov. 30	256,284	Feb. 28	240,166	
1963	237,361	May 31	255,666	Dec. 31	237,361	
1964	230,057	May 31	257,322	Dec. 31	230,057	
1965	220,289	May 31	255,071	Dec. 31	220,289	
1966	238,391	June 30	253,388	Jan. 31	220,302	
1967	248,970	May 31	268,845	Dec. 31	248,970	
1968	272,193	Dec. 31	272,193	Jan. 31	244,946	
1969	265,227	June 30	284,544	Sept. 30	262,528	
1970	276,367	May 31	284,824	Aug. 31	254,144	
1971	259,648	May 31	284,320	Dec. 31	259,648	
1972	246,395	May 31	279,490	Dec. 31	246,395	
1973	242,478	May 31	257,867	Feb. 28	235,362	
1974	265,020	Nov. 30	271,144	Jan. 31	233,035	
1975	271,354	Apr. 30	281,908	Aug. 31	256,616	
1976	285,471	Nov. 30	298,836	Aug. 31	277,272	
1977(1)	339,857	Nov. 30	345,197	Feb. 28	291,462	7,826
1978	309,421	Mar. 31	345,482	Dec. 31	309,421	66,860
1979	339,074	Nov. 30	347,415	Jan. 31	302,059	91,191
1980	358,166	Aug. 31	387,223	Jan. 31	357,500	107,800
1981	363,464	Apr. 30	397,497	Sept. 30	355,982	230,341
1982	349,730	Feb. 28	371,762	Sept. 30	340,675	293,827
1983	343,850	Feb. 28	363,265	July 31	335,131	379,089
1984	345,376	May 31	358,995	Sept. 30	325,207	450,505

(1) Stocks were first reported for the Strategic Petroleum Reserve (SPR) in October, 1977. SPR stocks are included neither in the December 31 levels nor the year's highs and lows but are reported separately in the last column.

Source: 1960-1975: U.S. Department of Interior, Annual Petroleum Statements.
1975-1984: U.S. Department of Energy, Annual Petroleum Statements and Petroleum Supply Annuals.

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks(1)	Year's High(1) Date	Year's High(1) Stocks	Year's Low(1) Date	Year's Low(1) Stocks	Strategic Petroleum Reserves Stocks
1985	320,892	May 31	356,630	Oct. 31	313,687	493,316
Jan.	336,127					457,409
Feb.	321,509					460,138
Mar.	329,624					461,617
Apr.	341,908					464,940
May	356,630					471,930
Jun.	344,058					476,571
Jul.	326,977					483,538
Aug.	318,474					487,126
Sep.	317,365					489,255
Oct.	313,687					489,881
Nov.	320,943					491,464
Dec.	320,892					493,316
1986	331,224	Oct. 31	343,892	June 30	326,654	511,565
Jan.	331,677					494,392
Feb.	331,724					495,381
Mar.	340,900					496,892
Apr.	337,791					498,781
May	328,640					499,877
Jun.	326,654					501,787
Jul.	341,798					503,400
Aug.	332,713					504,974
Sep.	337,799					506,385
Oct.	343,892					507,514
Nov.	339,084					509,471
Dec.	331,224					511,565
1987	348,995	Nov. 30	363,637	July 31	323,750	540,648
Jan.	333,029					514,910
Feb.	331,858					516,709
Mar.	332,451					519,987
Apr.	328,957					521,983
May	324,703					525,129
Jun.	327,598					527,187
Jul.	323,750					530,012
Aug.	332,468					531,978
Sep.	337,164					533,890
Oct.	355,894					535,652
Nov.	363,637					538,547
Dec.	348,995					540,648

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(1) December 31 stocks (stocks at month-end and year-end) and year's highs and lows exclude crude held in the SPR.

Source: U.S. Department of Energy, Petroleum Supply Annuals.

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks(1)	Year's High(1) Date	Year's High(1) Stocks	Year's Low(1) Date	Year's Low(1) Stocks	Strategic Petroleum Reserves Stocks
1988	331,250					559,515
Jan.	345,479					542,720
Feb.	347,835					544,146
Mar.	353,625					544,938
Apr.	357,131					547,258
May	357,724					547,949
Jun.	359,001	Jun 30	359,001			550,056
Jul.	349,330					551,344
Aug.	333,170					552,145
Sep.	328,448			Sep. 30	328,448	554,659
Oct.	339,607					556,001
Nov.	337,049					558,673
Dec.	331,250					559,515

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(1) Stocks at month-end and year-end and year's highs and lows exclude crude oil held in the SPR.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthlies.

Section VII
Table 20

TWENTY LEADING COMPANIES
MOTOR GASOLINE SALES(1)
(Millions of Gallons)

1970		1980		1983		1984	
Company	Sales	Company	Sales	Company	Sales	Company	Sales
Texaco	7,300.0	Exxon	7,930.6	Standard of Indiana	7,419.4	Chevron(10)	10,396.1
Shell	7,050.0	Shell	7,913.8	Shell	7,180.3	Standard of Indiana	7,714.5
Standard of New Jersey	6,656.0	Standard of Indiana	7,790.6	Exxon	7,066.9	Texaco(11)	7,693.7
Standard of Indiana	6,557.0	Mobil	6,329.2	Texaco	5,937.2	Shell	7,252.6
Gulf	6,398.0	Texaco	6,262.4	Mobil	5,768.3	Exxon	7,112.7
Mobil	5,921.0	Standard of California	6,073.8	Gulf	5,427.5	Mobil	5,786.5
Atlantic Richfield	4,979.0	Gulf	5,670.9	Standard of California	5,167.5	Atlantic Richfield	5,085.6
Standard of California	4,161.0	Atlantic Richfield	4,067.5	Atlantic Richfield	4,857.7	Unocal	3,687.0
Sun	3,721.0	Union	3,681.9	Unocal(7)	3,584.6	Phillips	2,902.5
Phillips	3,559.0	Phillips	2,978.4	Phillips	2,730.9	U.S. Steel	2,733.3
Union	2,950.0	Sun	2,888.4	Sun	2,669.9	Sun	2,654.8
Standard of Ohio(2)	2,569.0	Marathon	2,278.6	U.S. Steel	2,295.3	Southland	2,422.8
Continental(3)	2,107.0	Standard of Ohio-BP	2,227.6	Southland(8)	2,235.8	DuPont	2,053.6
Cities Service	1,839.0	Conoco	1,864.1	Standard of Ohio	2,004.5	Standard of Ohio	1,955.2
Marathon	1,552.0	Ashland	1,768.6	DuPont	1,981.5	Ashland	1,662.8
Ashland(4)	1,283.0	Getty	1,565.2	Ashland	1,715.9	Tosco	1,166.0
Getty(5)	1,108.0	Cities Service	1,517.9	Getty	1,278.4	Diamond Shamrock	1,005.6
Tenneco	838.0	Clark	1,195.8	Tosco	1,162.2	American Petrofina	990.6
Kerr-McGee(6)	690.0	Tosco	960.2	Diamond Shamrock(9)	944.2	Tenneco	793.3
Murphy	677.0	Tenneco	928.7	American Petrofina	913.5	Total	734.3
U.S. TOTAL	89,862.0	U.S. TOTAL	105,228.5	U.S. TOTAL	102,215.6	U.S. TOTAL	105,066.5

(1) Sales data represent net taxable gasoline gallonage sold in the U.S. by all petroleum marketers, including non-retail sales by suppliers, cooperatives, etc.
(2) Includes sales of subsidiaries BP Oil and Boron.
(3) Includes sales under the brand names of Douglas, Kayo and Onco.
(4) Includes sales of subsidiary Northwestern Refining Company.
(5) Includes all sales by Skelly Oil Company.
(6) Includes sales under the brand name Triangle.
(7) Unocal Corporation is the parent of Union Oil Company of California.
(8) Includes Cities Service. Southland acquired the refining, marketing and transportation sections of Citgo Petroleum Corp., a subsidiary of Occidental, on September 1, 1983.
(9) Diamond Shamrock acquired Sigmor in September 1983.
(10) Standard Oil of California acquired the Gulf Corporation on June 15, 1984 and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure reflects this acquisition.
(11) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figures reflects this acquisition.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

TWENTY LEADING COMPANIES
MOTOR GASOLINE SALES(1)
(Millions of Gallons)

1985		1986		1987	
Company	Sales	Company	Sales	Company	Sales
Chevron	8,423.4	Shell	8,692.1	Shell	9,074.7
Amoco (Standard of Indiana)	8,077.8	Amoco	8,330.2	Amoco	8,179.9
Shell	7,719.4	Exxon	7,799.2	Exxon	7,608.7
Exxon	7,492.9	Chevron(2)	7,620.9	Mobil	7,527.9
Texaco	7,051.6	Mobil	7,136.8	Chevron	7,233.2
Mobil	6,511.4	Texaco	7,102.0	Texaco	7,084.6
Atlantic Richfield	4,283.1	Unocal	4,058.9	Unocal	4,118.9
Union	3,979.1	Standard Oil	3,730.9	BP America (Standard)(5)	3,718.2
Standard Oil (Ohio)(2)	3,806.7	Phillips	3,204.4	Phillips	3,420.4
Phillips	3,201.4	ARCO	2,887.7	ARCO	3,201.5
Sun	2,690.7	Sun	2,777.7	Sun	2,917.7
Southland	2,525.3	Southland	2,768.7	USX(6)	2,720.2
U.S. Steel	2,499.2	USX (U.S. Steel)	2,752.4	DuPont(7)	2,373.5
DuPont	2,123.4	DuPont	2,246.6	Ashland	1,898.5
Ashland	1,700.1	Ashland	1,853.0	Petroleos de Venezuela(8)	1,655.3
American Petrofina	983.6	Diamond Shamrock	1,030.4	Cumberland Farms	1,469.6
Diamond Shamrock	976.3	American Petrofina	969.1	Southland(9)	1,458.5
Tenneco	888.5	Tenneco	913.2	Coastal(4)	1,005.0
Amerada Hess	764.4	Getty Petroleum	804.1	Diamond Shamrock Refining and Marketing(10)	952.9
Kerr-McGee	725.6	Cumberland Farms(11)	776.2	Tenneco	929.4
U.S. TOTAL	106,425.7	U.S. TOTAL	109,880.5	U.S. TOTAL	111,965.4

(1) This data represents net taxable gallonage sold in the U.S. by all petroleum marketers, including non-retail sales by suppliers, cooperataives, etc.
(2) Because they are under common control, sales for Standard of Ohio and BP are combined.
(3) During 1986 Chevron sold most of its petroleum marketing and distribution assets in ten northwestern states and Ohio. The primary purchaser of these operations was Cumberland Farms, Inc.
(4) Includes sales under brand names Derby and Belcher.
(5) BP America was formed in 1987 through the acquisition of the Standard Oil Company by BP North America Inc.
(6) USX's figure includes sales under the brand name Marathon and affiliated brands.
(7) DuPont's figure includes sales under the brand name Conoco and affiliated brands.
(8) Petroleos de Venezuela, the Venezuelan national oil company, owns one-half of Citgo Petroleum, and one-half of Champlin Refining Company.
(9) Southland's figure represents the Southland Corporation's 50 percent ownership of Citgo Petroleum.
(10) Diamond Shamrock Refining and marketing became an independent company on Apil 30, 1987 when it was spun-off from Maxus Energy Corporation (the former Diamond Shamrock).
(11) Cumberland Farms purchased the Gulf assets from Chevron in 11 northeastern states. Cumberland Farms operates a division using the Gulf brand name in all states in its marketing territory, except Florida.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion Paper #014R.

1986 U.S. OIL PRODUCT CONSUMPTION BY STATE
(In Thousands of Barrels)

State	Motor Gasoline	Aviation Fuels	Middle Distillates	Residual Fuel Oil	Asphalt	Propane	All Other	Total Products
Alabama	43,423	2,974	18,023	2,099	3,739	2,803	9,551	82,612
Alaska	6,391	14,198	8,339	2,738	400	442	4,249	36,757
Arizona	38,437	4,282	8,894	1,089	2,714	943	7,367	63,726
Arkansas	26,645	589	11,456	482	1,053	3,004	5,651	48,880
California	307,521	59,832	81,582	56,330	16,487	11,804	69,746	603,302
Colorado	40,415	7,488	10,589	714	3,315	2,866	8,547	73,934
Connecticut	29,414	1,164	13,690	23,906	2,278	1,210	9,368	81,030
Delaware	9,177	115	7,172	1,115	653	109	2,398	20,739
Dist. of Columbia	3,482	337	3,245	844	22	60	1,044	9,034
Florida	129,989	19,101	30,689	38,299	8,837	7,194	30,603	264,712
Georgia	75,062	15,451	22,002	3,321	6,049	4,921	16,576	143,382
Hawaii	8,125	7,585	2,918	14,269	292	345	4,384	37,918
Idaho	10,677	412	5,052	2,190	583	475	2,535	21,924
Illinois	93,336	1,568	29,489	2,020	6,633	6,284	18,213	157,543
Indiana	59,374	17,430	29,037	2,191	6,503	4,700	15,586	134,821
Iowa	34,432	589	16,799	2,292	2,185	6,358	8,190	70,845
Kansas	55,623	6,351	30,452	1,595	2,849	33,057	16,984	146,911
Kentucky	41,993	3,121	19,022	519	2,451	3,271	9,200	79,577
Louisiana	62,470	16,393	44,829	29,956	1,921	11,385	21,824	188,778
Maine	12,485	533	7,438	7,490	787	574	3,831	33,138
Maryland	44,522	2,540	18,362	7,802	5,600	1,354	10,481	90,661
Massachusetts	54,027	6,489	40,468	35,188	1,195	1,536	18,157	157,060
Michigan	99,100	5,441	25,624	1,834	3,629	9,304	18,946	163,878
Minnesota	53,481	7,355	22,247	1,498	5,878	6,090	12,621	109,170
Mississippi	34,752	3,600	19,921	276	2,042	9,039	9,102	78,732
Missouri	60,041	6,248	17,948	376	4,690	4,213	12,260	106,046
Montana	11,301	1,041	6,189	56	2,133	1,388	2,890	24,998
Nebraska	17,525	556	11,919	1,061	1,023	2,641	4,539	39,264
Nevada	14,164	3,588	5,892	475	608	693	3,323	28,743
New Hampshire	6,235	132	6,875	2,910	593	953	2,313	20,011
New Jersey	117,614	37,025	81,346	33,345	5,968	2,808	36,354	314,460
New Mexico	18,274	1,005	8,358	544	1,733	5,032	4,568	39,514
New York	118,974	2,449	64,259	56,077	6,905	5,649	33,244	287,557
North Carolina	74,770	4,843	28,705	6,446	4,861	5,729	16,386	141,740
North Dakota	9,152	256	7,893	945	941	2,923	2,890	25,000
Ohio	110,739	8,964	39,899	2,322	7,873	4,238	22,750	196,785
Oklahoma	48,808	3,558	18,269	1,082	3,519	5,959	10,614	91,814
Oregon	30,377	2,344	15,784	2,917	2,386	1,350	7,210	62,368
Pennsylvania	113,535	9,091	57,521	29,135	6,388	5,043	28,852	249,565
Rhode Island	10,799	461	8,132	3,264	1,586	342	3,214	27,798
South Carolina	36,277	816	11,914	2,577	2,218	2,771	7,395	63,968
South Dakota	8,881	264	5,537	652	874	1,383	2,299	19,890
Tennessee	64,586	5,468	27,092	725	4,459	2,434	13,695	118,459
Texas	317,041	77,699	142,024	37,371	14,634	67,144	85,741	741,654
Utah	18,735	3,316	7,066	632	1,389	1,088	4,213	36,439
Vermont	2,481	258	2,582	358	449	578	877	7,583
Virginia	65,933	9,806	30,139	8,299	4,766	2,806	15,915	137,664
Washington	50,284	14,336	28,613	10,956	2,578	2,081	14,229	123,077
West Virginia	14,327	186	6,288	1,111	606	350	2,989	25,857
Wisconsin	48,111	1,334	21,215	211	2,204	5,293	10,244	88,612
Wyoming	7,022	138	7,594	353	1,721	4,726	2,818	24,372
TOTAL U.S.	2,770,338	400,122	1,196,390	444,256	175,472	268,980	687,007	5,942,565

Sources: Energy Information Administration and The Asphalt Institute.

Section VII
Table 21a

1987 U.S. OIL PRODUCT CONSUMPTION BY STATE
(In Thousands of Barrels)

State	Motor Gasoline	Aviation Fuels	Middle Distillates	Residual Fuel Oil	Asphalt	Propane	All Other	Total Products
Alabama	45,821	3,086	20,834	2,002	5,015	3,072	12,359	92,189
Alaska	5,866	15,119	7,328	11,586	264	217	6,252	46,632
Arizona	37,872	5,859	8,716	9	2,561	960	8,666	64,643
Arkansas	28,459	939	12,906	97	1,046	3,207	7,223	53,877
California	317,257	76,967	82,662	49,462	16,914	11,180	85,840	640,282
Colorado	39,118	8,008	9,904	281	3,197	2,656	9,779	72,943
Connecticut	31,714	1,589	13,311	24,806	2,198	1,156	11,577	86,351
Delaware	6,549	5,110	4,321	1,543	627	1,268	3,006	22,424
Dist. of Columbia	3,927	0	3,001	367	271	0	1,171	8,737
Florida	137,148	19,962	32,650	35,629	8,262	7,267	37,299	278,217
Georgia	76,881	17,254	23,122	2,424	6,501	5,364	20,366	151,912
Hawaii	7,869	8,883	2,993	14,947	408	436	5,502	41,038
Idaho	10,652	452	5,033	21	513	441	2,649	19,761
Illinois	96,755	1,536	29,230	2,552	6,490	7,253	22,266	166,082
Indiana	58,340	17,765	28,900	1,541	7,810	4,430	18,391	137,177
Iowa	32,427	657	16,430	17	1,838	4,448	6,642	64,459
Kansas	55,490	3,595	27,583	706	2,686	23,919	17,646	131,625
Kentucky	42,985	4,219	20,133	392	2,776	3,070	11,391	84,966
Louisiana	63,182	25,091	43,711	32,520	2,338	11,371	27,591	205,804
Maine	13,739	632	7,221	10,530	948	517	5,200	38,787
Maryland	43,862	2,367	18,274	6,913	5,043	1,370	12,050	89,879
Massachusetts	59,305	7,127	46,468	36,073	1,520	1,566	23,542	175,601
Michigan	97,689	6,389	23,122	1,600	3,883	9,131	21,956	163,770
Minnesota	45,702	6,726	16,928	993	6,022	4,547	12,528	93,440
Mississippi	35,799	6,382	21,048	639	2,234	8,661	11,575	86,338
Missouri	58,789	6,758	17,412	776	4,472	4,391	14,336	106,934
Montana	11,146	1,850	5,890	115	1,814	1,189	3,407	25,411
Nebraska	17,630	856	11,585	0	1,276	2,429	5,229	39,005
Nevada	14,299	3,939	6,160	210	888	711	4,057	30,264
New Hampshire	7,391	156	8,162	1,894	801	929	2,993	2,326
New Jersey	99,754	39,400	73,040	32,792	5,751	2,855	39,262	292,854
New Mexico	18,509	1,317	8,835	114	2,126	4,823	5,531	41,255
New York	118,538	2,539	56,692	54,420	7,095	5,046	37,828	282,158
North Carolina	76,698	5,189	30,056	6,544	4,407	6,015	19,958	148,867
North Dakota	8,362	427	6,980	245	976	3,032	3,100	23,122
Ohio	105,839	10,404	38,737	1,870	10,024	4,685	26,561	198,120
Oklahoma	50,427	6,758	18,494	999	2,805	5,919	13,222	98,624
Oregon	31,150	2,543	15,926	2,358	2,200	1,225	8,633	64,395
Pennsylvania	112,646	9,545	54,576	21,280	7,240	5,496	32,634	243,417
Rhode Island	12,986	594	7,976	2,565	1,938	369	4,092	30,520
South Carolina	37,433	796	12,513	2,800	2,660	2,992	9,165	68,359
South Dakota	8,719	1,013	5,305	2	693	951	2,583	19,266
Tennessee	64,997	5,077	27,443	421	5,105	2,486	16,338	121,867
Texas	304,142	92,323	132,089	33,923	12,950	76,497	100,932	752,856
Utah	18,866	4,717	7,589	642	1,468	1,119	5,326	39,727
Vermont	2,752	26	2,113	276	537	511	962	7,177
Virginia	66,434	10,834	30,366	9,522	4,832	2,373	19,254	143,615
Washington	54,136	16,103	24,984	9,816	2,331	1,993	16,932	126,295
West Virginia	15,077	194	7,002	958	551	288	3,727	27,797
Wisconsin	48,264	1,156	20,169	231	2,462	3,831	11,784	87,897
Wyoming	7,297	245	8,034	407	1,510	3,009	3,174	23,676
TOTAL U.S.	2,767,044	470,473	1,163,959	422,832	180,279	262,668	815,487	6,082,742

Source: Department of Energy, Energy Information Administration and The Asphalt Institute.

HISTORICAL U.S. OIL CONSUMPTION: 1918-1946
Total and Major Product
(Thousands of Barrels)

Year	Total Consumption	Motor Fuels(1)	Distillate	Residual	Kerosine	Other
1918	NA	79,949	142,751(2)	(2)	34,442	14,564
1919	374,586	88,648	163,803(2)	(2)	33,188	88,947
1920	455,806	108,945	185,972(2)	(2)	33,082	127,807
1921	457,560	116,840	195,656(2)	(2)	29,537	115,527
1922	530,975	137,770	237,063(2)	(2)	34,851	121,291
1923	652,114	174,462	261,388(2)	(2)	35,536	180,728
1924	687,540	196,586	290,766(2)	(2)	36,712	163,476
1925	727,178	232,745	307,033(2)	(2)	39,969	147,431
1926	780,755	268,128	339,572(2)	(2)	38,140	134,915
1927	803,177	305,367	339,265(2)	(2)	37,491	121,054
1928	860,241	338,881	383,974(2)	(2)	36,235	101,151
1929	940,581	382,878	415,156(2)	(2)	36,032	106,515
1930	926,642	397,609	368,531(2)	(2)	34,736	125,766
1931	902,593	403,843	334,668(2)	(2)	31,358	132,724
1932	825,230	377,791	65,101	243,056	33,221	116,061
1933	868,200	380,494	64,748	258,957	38,493	125,508
1934	919,838	410,339	74,824	265,547	44,234	124,894
1935	983,317	434,810	86,028	280,695	47,645	134,139
1936	1,092,379	481,606	102,757	307,884	51,428	148,704
1937	1,169,205	519,352	116,841	325,514	54,972	152,526
1938	1,136,705	523,003	117,449	291,833	56,360	148,060
1939	1,230,486	555,509	134,973	323,488	60,503	156,013
1940	1,326,620	589,490	160,851	340,163	68,776	167,340
1941	1,485,779	667,505	172,824	383,422	69,469	192,559
1942	1,449,908	589,110	185,661	405,697	69,767	199,673
1943	1,521,426	568,238	208,110	467,008	68,598	209,472
1944	1,671,263	632,482	209,320	512,020	71,812	245,629
1945	1,772,685	696,333	226,084	523,423	75,573	251,272
1946	1,792,786	735,417	242,894	480,029	89,088	245,358

(1) Motor gasoline
(2) Distillate and residual fuel oils not reported separately until 1932.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbooks.

BASIC PETROLEUM DATA BOOK

SECTION VIII. REFINING

Table 1. Estimated Worldwide Crude Oil Refining Capacity by Area

Table 2 Worldwide Crude Oil Refinery Runs

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Table 12. U.S. Gas Processing Capacity and Average Production

Table 13. World Gas Processing Capacities and Average Production

Section VIII
Table 1

ESTIMATED WORLDWIDE CRUDE OIL REFINING CAPACITY BY AREA
AS OF JANUARY 1
(Barrels per day)

Year	United States(1)	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia	Europe	Total Free World	Sino Soviet Bloc	Total World
1947	5,569,482	1,387,452	6,956,934	733,500	48,750	174,405	630,445	8,544,034	575,000(2)	9,119,034
1948	6,034,252	1,479,350	7,513,602	859,100	47,750	202,850	682,990	9,306,292	650,000(2)	9,956,292
1949	6,438,995	1,722,370	8,161,365	915,100	49,000	283,800	1,049,980	10,459,245	650,000(2)	11,109,245
1950	6,696,300	1,450,500	8,146,800	916,500	39,000	266,000	859,200	10,227,500	1,134,000	11,361,500
1951	6,963,644	1,770,400	8,734,044	940,900	41,000	282,900	1,014,900	11,013,744	1,010,000(2)	12,023,744
1952	7,332,885	1,700,100	9,032,985	950,000	49,000	344,000	1,495,000	11,870,985	1,108,100(2)	12,979,085
1953	7,619,720	2,180,200	9,799,920	1,093,900	52,100	379,200	1,835,400	13,160,520	1,087,000	14,247,520
1954	7,983,977	2,392,700	10,376,677	1,159,100	72,400	459,800	2,077,500	14,145,477	1,246,100	15,391,577
1955	8,386,044	2,566,500	10,952,544	1,184,300	68,400	613,700	2,365,900	15,184,844	1,784,000	16,968,844
1956	8,582,636	2,776,800	11,359,436	1,272,800	72,400	731,000	2,373,700	15,809,336	1,481,000	17,290,336
1957	9,071,697	3,087,400	12,159,097	1,235,200	93,400	876,000	2,762,700	17,126,397	1,550,000	18,676,397
1958	9,358,307	3,438,600	12,796,907	1,253,700	98,400	1,088,500	2,902,900	18,140,407	(3)	(3)
1959	8,761,446	3,680,500	13,441,946	1,432,800	100,100	1,229,600	3,633,200	19,837,646	(3)	(3)
1960	9,842,624	3,762,300	13,604,924	1,434,800	116,500	1,374,600	3,977,500	20,508,324	3,322,000	23,830,324
1961	9,998,573	4,188,000	14,186,573	1,481,800	122,500	1,431,700	4,476,100	21,698,673	(3)	(3)
1962	10,033,047	4,442,900	14,475,947	1,514,100	140,300	1,913,000	4,918,100	22,961,447	(3)	(3)
1963	10,010,921	4,687,200	14,698,121	1,754,900	196,800	2,129,800	5,149,400	23,929,021	(3)	(3)
1964	10,305,774	5,828,400	15,134,174	1,801,300	365,200	2,537,000	6,263,500	26,101,174	(3)	(3)
1965	10,419,851	5,021,500	15,441,351	1,801,400	502,900	3,176,600	7,510,500	28,432,751	4,656,000	33,088,751
1966	10,393,839	5,344,500	15,738,339	1,910,200	613,300	3,516,700	8,541,900	30,320,439	3,976,000	34,296,439
1967	10,658,407	5,544,500	16,202,907	1,960,200	704,500	3,955,700	9,526,900	32,350,207	(3)	(3)
1968	11,353,404	5,883,100	17,236,504	2,052,700	720,100	4,323,900	11,085,000	35,418,204	5,925,000	41,343,204
1969	11,702,309	6,290,200	17,992,509	2,296,500	756,100	4,919,800	12,884,300	38,849,209	6,345,000	45,194,209
1970	12,021,273	6,512,500	18,533,773	2,437,900	784,900	5,565,900	13,941,400	41,263,873	7,092,000	48,355,873
1971	12,860,228	7,128,600	19,988,828	3,171,700	924,900	6,060,900	15,177,200	45,323,528	7,860,000	53,183,528
1972	13,292,468	7,578,600	20,871,068	2,851,300	902,400	6,817,700	16,982,800	48,425,268	8,420,000	56,845,268
1973	13,671,384	8,175,800	21,847,184	2,757,700	825,100	7,915,700	16,826,700	50,172,384	9,110,000	59,282,384
1974	14,361,536	9,053,800	23,415,336	2,882,200	1,092,200	8,932,700	18,110,100	54,432,536	9,686,000	64,118,536
1975	14,960,710	9,536,103	24,496,813	3,280,613	1,083,305	9,397,360	18,718,363	56,976,454	10,575,000	67,551,454

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(1) Includes operating capacity plus operable shutdown but excludes inoperable shutdown capacity
(2) Estimates for U.S.S.R. only
(3) Data not available

Source: United States: U.S. Bureau of Mines, Petroleum Refineries in the United States and Puerto Rico: Annual
Rest of the world: Oil & Gas Journal, "World Wide Issues" and "International Petroleum Encyclopedia"

Section VIII
Table 1a

ESTIMATED WORLDWIDE CRUDE OIL REFINING CAPACITY BY AREA
AS OF JANUARY 1
(Barrels per day)

Year	United States(1)	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia	Europe	Total Free World	Sino Soviet Bloc	Total World
1976	15,236,621	9,713,093	24,949,714	3,284,951	1,328,200	9,868,344	19,972,306	59,403,515	12,406,000	71,809,515
1977	16,398,372	10,015,186	26,413,558	3,347,855	1,444,400	10,047,965	20,859,376	62,113,154	13,067,810	75,180,964
1978	17,047,724	10,592,020	27,352,020	3,506,484	1,467,157	10,176,819	20,728,204	63,352,984	13,938,000	77,290,984
1979	17,440,885	10,273,030	27,713,915	3,546,029	1,667,608	10,284,966	20,328,614	63,541,132	14,748,000	78,289,132
1980	17,988,121	10,683,671	28,671,792	3,518,080	1,666,108	10,386,375	20,243,747	64,486,102	15,346,000	79,832,102
1981	18,620,520	10,716,881	29,337,401	3,729,646	1,697,658	10,554,691	20,205,799	65,524,895	16,036,500	81,561,395
1982	17,889,734	10,720,055	28,609,789	3,312,152	1,761,870	10,966,825	19,444,519	64,095,155	16,533,000	80,628,155
1983	16,859,337	9,873,816	26,733,153	3,685,333	1,882,105	10,902,204	17,124,989	60,327,784	16,873,000	77,200,784
1984	16,137,141	9,590,962	25,520,962	3,901,082	1,879,990	10,473,079	16,231,932	58,114,186	17,200,000	75,314,186
1985	15,658,769	9,457,706	24,857,706	4,052,673	2,447,156	10,393,562	15,654,622	57,664,488	17,500,000	75,164,488
1986	15,458,948	8,613,690	24,072,638	4,274,255	2,520,403	10,111,652	14,071,507	55,050,455	17,500,000	72,550,455
1987	15,565,513	8,676,740	24,242,253	3,862,622	2,523,563	10,400,180	13,929,325	54,957,943	17,610,000	72,567,943
1988	15,915,418	8,856,748	24,772,166	4,146,222	2,630,250	10,274,302	14,127,595	55,950,479	17,610,000	73,560,479
1989	15,556,700	8,839,238	24,395,938	4,334,676	2,786,987	10,064,786	13,858,624	55,441,011	17,798,135	73,239,146

(1) Includes operating capacity plus operable shutdown but excludes inoperable shutdown capacity

Source: 1976-1988: United States: U.S. Energy Information Administration, Petroleum Refineries in the United States and Puerto Rico, Petroleum Supply Annuals.
Rest of the World: Oil & Gas Journal, "Worldwide Report" Issue
1989: Oil and Gas Journal, "Worldwide Report" issue, Dec. 26, 1988.

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
United States	9,043	9,444	9,815	10,312	10,629	10,870	11,200	11,696	12,431	12,133	12,442	13,416
Utilization Rate (%)	86.8	90.9	92.1	90.8	90.8	90.4	87.1	88.0	90.9	84.5	83.2	88.0
Other Western Hemisphere	4,880	5,070	5,240	5,485	5,780	6,185	6,690	6,980	7,645	7,655	7,215	7,380
Utilization Rate (%)	97.2	94.9	94.5	93.2	91.9	95.0	93.8	92.1	93.5	84.5	75.7	76.0
Western Europe	7,175	8,080	8,830	10,045	11,195	12,730	13,145	13,910	15,065	14,175	12,415	13,625
Utilization Rate (%)	95.5	94.6	92.7	90.6	86.9	91.3	86.6	81.9	89.5	78.3	66.3	68.2
Middle East	1,525	1,580	1,645	1,765	1,875	2,105	2,240	2,165	2,170	2,330	2,075	2,300
Utilization Rate (%)	84.7	82.7	83.9	86.0	81.6	86.3	70.6	75.9	78.7	80.8	63.2	70.0
Africa	465	540	570	520	535	710	740	815	905	910	975	1,020
Utilization Rate (%)	92.4	88.1	80.9	72.2	70.7	90.4	80.0	90.4	109.7	83.3	90.0	76.8
Asia	2,530	2,975	3,475	4,350	4,930	5,580	6,230	6,350	7,345	7,035	6,755	7,375
Utilization Rate (%)	79.6	84.6	87.8	100.6	100.2	100.3	102.8	93.1	92.8	78.8	71.9	74.7
Total Non-Communist World	25,618	27,689	29,575	32,477	34,944	38,180	40,245	41,916	45,561	44,238	41,877	45,116
Utilization Rate (%)	90.1	91.3	91.4	91.7	89.9	92.5	88.8	86.6	90.8	81.3	73.5	75.9
Communist Nations	4,890	5,270	5,655	6,115	6,705	7,335	7,845	8,555	9,365	10,185	11,025	11,575
Utilization Rate (%)	NA	NA	NA	NA	NA	103.4	99.8	101.6	102.8	105.2	104.3	93.3
Total World	30,508	32,959	35,230	38,592	41,649	45,515	48,090	50,471	54,926	54,423	52,902	56,691
Utilization Rate (%)	NA	NA	NA	NA	NA	94.1	90.4	88.8	92.7	84.9	78.3	78.9

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S. Bureau of Mines: Crude Petroleum, Petroleum Products, and Natural Gas Liquids, Annual and December Issues
Rest of the world, BP Statistical Review of the World Oil Industry, Annual Reports

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
United States	14,602	14,739	14,648	13,483	12,477	11,774	11,685	12,044	12,165	12,716
Utilization Rate (%)	89.0	86.5	84.0	75.0	67.0	65.8	69.3	76.9	77.6	82.3
Other Western Hemisphere	7,520	7,795	8,180	8,545	8,520	7,730	7,370	7,285	6,945	6,955
Utilization Rate (%)	75.1	73.6	79.6	80.0	79.5	72.1	74.7	76.0	74.4	73.8
Western Europe	12,775	12,855	13,665	12,330	10,970	10,075	9,710	9,790	9,490	10,060
Utilization Rate (%)	61.2	62.0	67.2	60.9	54.3	51.8	56.7	60.3	60.6	70.2
Middle East	2,240	2,535	2,365	2,445	2,205	2,245	2,515	2,665	2,795	2,950
Utilization Rate (%)	66.9	72.3	66.7	69.5	59.1	67.8	68.2	75.8	75.3	69.0
Africa	1,165	1,280	1,355	1,460	1,525	1,735	1,920	1,975	2,015	2,095
Utilization Rate (%)	80.7	87.0	81.2	87.6	89.8	98.5	102.0	77.8	79.2	83.1
Asia	7,600	7,905	8,165	7,730	7,560	7,160	7,120	7,310	7,370	7,465
Utilization Rate (%)	76.5	77.7	79.4	74.4	71.6	65.3	65.3	69.8	70.9	71.0
Total Non-Communist World	45,902	47,109	48,378	45,993	43,257	40,720	40,320	41,069	40,780	42,241
Utilization Rate (%)	73.9	74.4	76.1	71.3	66.0	63.5	66.8	70.7	72.2	75.3
Communist Nations	11,930	12,875	13,230	13,320	13,420	13,575	13,675	13,885	14,165	14,500
Utilization Rate (%)	91.3	92.4	89.7	86.8	83.7	82.1	81.0	80.7	80.9	81.9
Total World	57,832	59,984	61,608	59,313	56,677	54,295	53,995	54,954	54,945	56,741
Utilization Rate (%)	76.9	77.6	78.7	74.3	68.5	67.3	69.9	73.0	74.5	76.9

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(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S.--Energy Information Administration, Annual Petroleum Statements and Petroluem Supply Annuals.
Rest of world--BP Statistical Report of the World Oil Industry, Annual Report.

Section VIII
Table 2b

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1987
United States	12,854
Utilization Rate (%)	83.1
Other Western Hemisphere	7,135
Utilization Rate	75.3
Western Europe	9,795
Utilization Rate	69.9
Middle East	2,970
Utilization Rate	72.1
Africa	2,170
Utilization Rate	82.5
Asia	7,375
Utilization Rate	71.8
Total Non-Communist World	42,299
Utilization Rate	75.3
Communist Nations	14,700
Utilization Rate	82.2
Total World	56,999
Utilization Rate	76.9

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S.--Department of Energy, Energy Information Administraiton, Petroleum Supply Annual
Rest of World--BP Statistical Review of World Energy, Annual

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1980					1981				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,526	2,661	1,580	3,855	14,622	6,437	2,613	1,321	3,638	14,009
Canada	665	499	309	557	2,030	638	448	271	526	1,883
Mexico	329	245	309	371	1,254	360	270	365	297	1,292
Central and South America(1)	920	1,134	2,011	1,151	5,216	943	1,060	1,773	1,086	4,862
Western Europe	2,477	4,112	3,592	3,060	13,241	2,368	3,649	3,217	2,973	12,207
Middle East	325	545	890	1,076	2,836	304	544	837	996	2,681
Africa	286	394	433	378	1,491	297	397	434	371	1,499
Asia	1,473	1,864	3,691	3,092	10,120	1,410	2,017	2,917	3,355	9,699
Eastern Europe and U.S.S.R.	2,080	2,962	3,478	3,665	12,185	2,087	2,981	3,490	3,493	12,051
Total World	15,081	14,415	16,294	17,205	62,995	14,844	13,979	14,625	16,735	60,183

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Energy Information Administration, International Energy Annuals.

Section VIII
Table 3a

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1982					1983				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,358	2,606	1,070	3,357	13,391	6,360	2,456	852	3,470	13,138
Canada	619	396	208	416	1,639	597	388	175	406	1,566
Mexico	346	235	350	371	1,302	353	224	350	402	1,329
Central and South America (1)	940	988	1,720	1,063	4,711	963	1,034	1,511	1,153	4,661
Western Europe	2,456	3,530	2,896	2,307	11,187	2,529	3,434	2,630	2,398	10,991
Middle East	324	648	925	892	2,789	319	681	925	958	2,883
Africa	317	454	507	434	1,712	324	505	547	461	1,837
Asia	1,439	2,200	2,781	2,723	9,143	1,544	2,242	2,712	2,711	9,209
Eastern Europe and U.S.S.R.	2,158	3,023	3,437	3,602	12,220	2,271	3,090	3,476	3,441	12,278
Total World	14,957	14,080	13,894	15,165	58,096	15,260	14,054	13,178	15,399	57,892

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Energy Information Administration, International Energy Annuals.

Section VIII
Table 3b

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1984					1985				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,478	2,680	891	3,630	13,679	6,441	2,687	882	3,740	13,750
Canada	586	410	161	548	1,705	589	401	127	691	1,807
Mexico	363	266	375	479	1,483	360	292	398	523	1,572
Central and South America(1)	1,027	1,075	1,417	1,205	4,723	908	1,049	1,245	1,175	4,379
Western Europe	2,624	3,609	2,537	3,170	11,939	2,684	3,574	2,306	3,128	11,692
Middle East	401	805	970	1,122	3,296	427	952	1,034	1,065	3,479
Africa	322	495	536	527	1,879	351	515	537	494	1,896
Asia	1,612	2,325	2,623	2,979	9,540	1,659	2,417	2,343	2,966	9,385
Eastern Europe and U.S.S.R.	2,153	3,043	3,452	3,426	12,075	2,172	2,984	3,426	3,184	11,766
TOTAL WORLD	15,566	14,708	12,962	17,085	60,320	15,591	14,872	12,298	12,966	59,727

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Department of Energy, Energy Information Administration, International Energy Annuals.

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1986				
	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,752	2,796	889	4,085	14,522
Canada	551	394	115	475	1,535
Mexico	369	243	468	446	1,526
Central and South America(1)	1,892	1,062	1,178	1,217	4,349
Western Europe	2,772	3,902	2,450	2,905	12,029
Middle East	493	1,022	1,301	1,193	4,009
Africa	317	504	600	496	1,917
Asia	1,694	2,570	2,292	3,030	9,586
Eastern Europe and U.S.S.R.	2,247	2,840	4,219	3,089	12,395
TOTAL WORLD	16,087	15,334	13,512	16,935	61,868

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Department of Energy, Energy Information Administration, International Energy Annual 1987.

Section VIII
Table 4

U.S. CRUDE OIL REFINING CAPACITY
(AS OF JANUARY 1)

Year	NUMBER OF REFINERIES			CRUDE OIL THROUGHPUT CAPACITY		
	Operating	Shutdown	Total	Operating	Operable Shutdown	Inoperable Shutdown(1)
1947	361	38	399	5,336,399	233,083(2)	
1948	352	38	390	5,825,566	208,686(2)	
1949	336	39	375	6,230,505	208,490(2)	
1950	320	47	367	6,222,998	473,302(2)	
1951	325	32	357	6,701,815	261,829(2)	
1952	327	23	350	7,161,366	171,519(2)	
1953	315	28	343	7,481,701	138,019	18,941
1954	308	29	337	7,782,103	201,874	22,920
1955	296	30	326	8,069,154	316,890	34,586
1956	294	24	318	8,380,801	201,835	49,754
1957	298	21	319	8,808,841	262,856	51,977
1958	289	29	318	8,939,907	418,400	49,400
1959	291	22	313	9,450,741	310,705	58,400
1960	290	20	310	9,543,329	299,295	58,800
1961	289	22	311	9,629,685	368,888	11,500
1962	287	24	311	9,812,248	220,799	72,100
1963	287	21	308	9,814,791	196,130	107,400
1964	282	22	304	10,063,164	242,610	79,600
1965	273	27	300	10,161,311	258,540	354,744
1966	267	19	286	10,171,159	222,680	98,900
1967	260	21	281	10,412,447	245,960	101,200
1968	270	21	291	11,172,694	180,710	179,450
1969	264	20	284	11,575,829	126,480	37,200
1970	262	19	281	11,882,393	138,880	53,050
1971	253	26	279	12,658,248	201,980	159,750
1972	250	32	282	13,034,818	257,650	145,000
1973	253	28	281	13,482,909	188,475	132,200
1974	257	27	284	14,220,316	141,220	127,900
1975	262	28	290	14,696,750	263,960	208,100

(1) Facilities inoperable, needing extensive reconditioning
(2) Not identified separately prior to 1953

Source: U.S. Bureau of Mines, "Petroleum Refineries in the United States and Puerto Rico" Annual

U.S. CRUDE OIL REFINING CAPACITY
(AS OF JANUARY 1)

	NUMBER OF REFINERIES			CRUDE OIL THROUGHPUT CAPACITY		
Year	Operating	Shutdown(3)	Total	Operating	Operable Shutdown	Inoperable Shutdown(2)
1976	265	22	287	14,867,529	369,092	190,900
1977	273	18	291	15,861,735	536,637	211,500
1978	290	12	302	16,793,724	254,000	182,223
1979	301	10	311	17,147,875	293,010	103,500
1980	311	8	319	17,612,652	376,469	N.A.
1981	315	9	324	18,051,260	569,260	N.A.
1982	254	47	301	16,103,579	1,786,155	N.A.
1983	233	25	258	14,960,647	1,898,690	N.A.
1984	214	33	247	14,837,685	1,299,456	N.A.
1985	199	24	223	14,360,583	1,298,186	N.A.
1986	192	24	216	14,638,507	820,441	N.A.
1987	195	24	219	14,940,463	625,050	N.A.
1988	195	18	213	15,017,968	897,450	N.A.

(1) Does not include Puerto Rico refineries.
(2) Facilities inoperable, needing extensive reconditioning.
(3) Figures beginning with 1980 are for operable shutdown only.

Source: U.S. Energy Information Administration, "Petroleum Refineries in the United States and U.S. Territories" Annual
Formerly Titled, "Petroleum Refineries in the United States and Puerto Rico" Annual
1982-1988: U.S. Energy Information Administration, Petroleum Supply Annuals

Section VIII
Table 5

PERCENTAGE YIELDS OF REFINED PETROLEUM PRODUCTS FROM CRUDE OIL(1) IN THE UNITED STATES-ANNUALLY 1964-1977

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Gasoline	44.1	44.0	44.4	44.0	43.9	44.8	45.3	46.2	46.2	45.6	45.9	46.5	45.5	43.4
Jet Fuel	5.6	5.7	6.2	7.5	8.3	8.2	7.5	7.4	7.2	6.8	6.8	7.0	6.8	6.6
Ethane (including Ethylene)	(2)	(2)	(2)	(2)	(2)	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Liquefied Gases	3.3	3.2	3.0	3.1	3.1	2.9	3.0	2.9	2.8	2.8	2.6	2.4	2.4	2.3
Kerosine	2.9	2.8	2.9	2.7	2.7	2.6	2.3	2.1	1.8	1.7	1.3	1.2	1.1	1.2
Distillate Fuel Oil	22.8	22.9	22.5	22.2	22.1	21.7	22.4	22.0	22.2	22.5	21.8	21.3	21.8	22.4
Residual Fuel Oil	8.2	8.1	7.6	7.7	7.2	6.8	6.4	6.6	6.8	7.7	8.7	9.9	10.3	12.0
Petrochemical Feedstocks	1.8	1.7	2.1	2.4	2.5	2.5	2.5	2.7	2.9	2.9	3.0	2.7	3.3	3.6
Special Naphthas	0.8	0.9	0.9	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.6	0.7	0.6
Lubricants	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.6	1.2	1.3	1.2
Wax	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1
Coke	2.6	2.5	2.5	2.5	2.5	2.6	2.7	2.6	2.8	2.9	2.8	2.8	2.6	2.5
Asphalt	3.5	3.7	3.8	3.5	3.6	3.5	3.6	3.8	3.6	3.6	3.7	3.2	2.8	2.9
Road Oil	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.0	0.1
Still Gas	4.0	4.1	3.9	3.9	4.0	4.1	4.1	3.8	3.9	3.9	3.9	3.9	3.7	3.6
Miscellaneous	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.7	1.0	1.0
Shortage(3)	2.4	-2.4	-2.5	-2.9	-3.0	-3.1	-3.2	-3.4	-3.3	-3.6	-3.9	-3.7	-3.5	-3.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Other unfinished oils added to crude oil in computing yield
(2) Included with liquefied gases
(3) Processing Gain(-) or Loss(+)

Source: U.S. Energy Information Administration

Section VIII
Table 5a

PERCENTAGE YIELDS OF REFINED PETROLEUM PRODUCTS FROM CRUDE OIL(1) IN THE UNITED STATES-ANNUALLY 1978-1985

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Gasoline	44.1	43.0	44.5	44.8	46.4	47.6	46.7	45.8	45.9	46.6
Jet Fuel	6.6	6.9	7.4	7.6	8.1	8.5	9.1	9.6	9.8	10.0
Ethane (including Ethylene)	0.1	0.1	-	0.1	-	-	-	-	-	-
Liquefied Gases	2.3	2.3	2.4	2.4	2.2	2.7	2.9	3.1	3.2	3.4
Kerosine	1.0	1.3	1.0	0.9	0.9	0.9	0.9	0.8	0.7	0.6
Distillate Fuel Oil	21.4	21.5	19.7	20.5	21.5	20.5	21.5	21.6	21.2	20.5
Residual Fuel Oil	11.3	11.5	11.7	10.4	8.8	7.1	7.1	7.1	6.7	6.6
Petrochemical Feedstocks	4.1	4.7	5.1	4.7	3.6	3.3	2.8	2.8	3.1	2.9
Special Naphthas	0.7	0.6	0.7	0.6	0.4	0.5	0.4	0.4	0.4	0.4
Lubricants	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.2	1.3
Wax	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Coke	2.5	2.6	2.7	3.1	3.4	3.5	3.5	3.7	3.8	3.8
Asphalt	3.2	3.1	2.9	2.7	2.7	3.1	3.1	3.2	3.1	3.3
Road Oil	0.1	-	0.1	-	-	(4)	(4)	(4)	(4)	(4)
Still Gas	3.7	3.8	4.0	4.3	4.4	4.6	4.5	4.7	4.9	4.8
Miscellaneous	0.9	0.8	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.5
Shortage(2)	-3.4	-3.6	-4.4	-4.0	-4.4	-4.1	-4.4	-4.5	-4.7	-4.8
TOTAL(3)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Other unfinished oils added to crude oil in computing yield.
(2) Processing ~~Gain (-) or~~ Loss (+).
(3) Totals may not add due to independent rounding.
(4) Included in asphalt.

Source: 1978-1980--U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987--U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 6

U.S. CRUDE OIL REFINERY RUNS BY P.A.D. DISTRICT-DOMESTIC vs FOREIGN
(Thousands of barrels per day)

	DISTRICT II		DISTRICT II		DISTRICT III		DISTRICT IV		DISTRICT V		TOTAL	
Year	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
1947	648	265	1,312	-	1,889	2	133	-	826	-	4,808	267
1948	640	326	1,418	-	2,154	13	151	-	895	-	5,258	339
1949	486	374	1,404	-	1,973	46	165	-	876	3	4,904	423
1950	545	459	1,594	-	2,053	23	185	-	880	-	5,257	482
1951	641	477	1,796	1	2,398	10	215	-	947	10	5,997	498
1952	618	517	1,845	3	2,463	12	223	-	958	31	6,107	563
1953	601	552	1,949	7	2,601	8	235	-	975	71	6,361	638
1954	549	585	1,953	7	2,594	12	238	-	970	51	6,304	655
1955	530	633	2,119	18	2,832	30	255	-	968	95	6,704	776
1956	559	669	2,224	54	3,010	32	268	(1)	943	178	7,004	933
1957	640	656	2,219	60	2,898	24	273	(1)	900	249	6,930	989
1958	555	644	2,224	71	2,760	43	266	(1)	892	188	6,697	946
1959	574	641	2,340	59	2,922	27	290	(1)	902	238	7,028	965
1960	550	667	2,349	66	2,978	6	285	(1)	891	275	7,053	1,014
1961	573	650	2,347	86	3,020	6	284	(1)	910	308	7,134	1,050
1962	546	668	2,366	97	3,174	4	303	(1)	898	354	7,287	1,123
1963	566	680	2,445	96	3,322	3	298	9	926	342	7,557	1,130
1964	523	689	2,463	107	3,408	2	307	13	911	384	7,612	1,195
1965	489	711	2,533	112	3,506	(1)	317	13	957	405	7,802	1,241
1966	548	711	2,660	130	3,664	1	325	13	1,024	368	8,221	1,223
1967	680	587	2,693	156	3,901	2	326	18	1,095	357	8,695	1,120
1968	596	707	2,744	214(2)	4,116	2	339	27	1,243	324	9,038	1,274
1969	560	749	2,773	240(2)	4,263	(1)	351	35	1,267	391	9,214	1,415
1970	706	584	2,844	310(2)	4,357	-	345	47	1,297	380	9,549	1,321
1971	649	682	2,853	377(2)	4,438	54	360	45	1,239	503	9,539	1,661
1972	347	971	2,850	461(2)	4,741	75	360	37	1,193	661	9,491	2,205
1973	237	1,264	2,774	711(2)	4,656	398	372	44	1,167	808	9,206	3,225
1974	236	1,173	2,654	679(2)	4,317	786	376	44	1,098	770	8,681	3,452
1975	166	1,242	2,637	775(2)	4,078	1,182	380	45	1,086	851	8,347	4,095

(1) Less than 1,000 barrels daily
(2) Includes some Athabasca hydrocarbons

Source: Bureau of Mines, Annual Petroleum Statements

Section VIII
Table 6a

U.S. CRUDE OIL REFINERY RUNS BY P.A.D. DISTRICT-DOMESTIC vs FOREIGN
(Thousands of barrels per day)

	DISTRICT I		DISTRICT II		DISTRICT III		DISTRICT IV		DISTRICT V		TOTAL	
Year	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
1976	170	1,416	2,611	989(2)	3,957	1,760	391	50	1,038	1,034	8,167	5,249
1977	136	1,538	2,386	1,393	3,886	2,460	426	54	1,199	1,124	8,033	6,561
1979	166	1,480	2,238	1,491	3,584	2,806	415	62	1,865	539	8,269	6,379
1980	221	1,233	2,098	1,198	3,645	2,298	394	47	1,903	445	8,261	5,221
1981(3)	205	1,126	2,181	785	3,630	1,951	390	33	1,900	300	8,306	4,195
1982	211	982	2,161	621	3,876	1,522	374	41	1,888	191	8,510	3,357
1983	211	827	2,174	570	3,909	1,509	380	44	1,883	227	8,556	3,177
1984	174	936	2,221	536	3,955	1,622	401	32	2,061	214	8,812	3,341
1985	152	767	2,114	590	4,102	1,365	393	194	2,124	194	8,884	2,958
1986	144	1,030	2,073	753	3,848	2,143	370	63	2,273	229	8,707	4,217
1987	117	1,136	2,034	812	3,536	2,480	371	66	2,319	199	8,376	4,693

(2) Includes some Athabasca hydrocarbons.
(3) Beginning with 1981, figures are for refinery receipts of crude oil

Source: U.S. Energy Information Administration, P.A.D. Supply/Disposition Annual
1981-1982--U.S. Energy Information Administration, Petroleum Supply Annual
1983-1987--U.S. Energy Information Administration, Petroleum Supply Annual, Refinery Capacity

Section VIII
Table 7

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1988

District and State	Number of Operable Refineries			Crude Capacity			
				Barrels Per Calendar Day		Barrels Per Stream Day	
	Total	Operating	Idle(1)	Operating	Idle	Operating	Idle
Delaware	1	1	0	140,000	0	150,000	0
Florida	1	0	1	0	17,000	0	20,000
Georgia	2	1	1	5,655	28,000	6,000	29,000
New Jersey	6	6	0	434,400	0	456,400	0
New York	1	1	0	41,850	0	45,000	0
North Carolina	2	1	1	3,000	10,000	3,500	12,000
Pennsylvania	8	8	0	727,000	0	759,500	0
Virginia	2	2	0	53,400	0	55,550	0
West Virginia	2	2	0	16,808	0	17,500	0
PAD District 1 Total	25	22	3	1,422,113	55,000	1,493,450	61,000
Illinois	7	7	0	854,700	75,000	898,600	80,000
Indiana	5	4	1	422,900	1,000	437,100	2,000
Kansas	8	6	2	322,400	30,400	339,483	32,000
Kentucky	3	2	1	218,900	600	226,300	1,000
Michigan	3	3	0	113,500	0	120,000	0
Minnesota	2	2	0	222,143	0	237,220	0
North Dakota	1	1	0	58,000	0	60,000	0
Ohio	4	4	0	488,100	0	507,000	0
Oklahoma	6	6	0	381,500	0	398,700	0
Tennessee	1	1	0	60,000	0	65,000	0
Wisconsin	1	1	0	32,000	0	34,000	0
PAD District II Total	41	37	4	3,174,143	107,000	3,320,403	115,000
Alabama	6	6	0	180,600	0	187,300	0
Arkansas	3	3	0	51,400	7,000	53,000	8,000
Louisiana	23	20	3	2,262,207	359,000	2,773,775	414,875
Mississippi	6	6	0	368,400	0	390,900	0
New Mexico	4	4	0	75,600	0	84,607	0
Texas	36	32	4	3,902,900	236,100	4,170,400	247,000
PAD District III Total	78	71	7	6,841,107	602,100	7,245,107	669,875
Colorado	2	2	0	76,500	0	80,000	0
Montana	5	4	1	130,450	13,400	135,000	14,000
Utah	6	6	0	154,500	0	160,000	0
Wyoming	6	5	1	164,555	350	170,700	400
PAD District IV Total	19	17	2	526,005	13,750	545,300	14,400
Alaska	6	6	0	222,700	0	238,260	0
California	33	31	2	2,259,600	119,600	2,395,509	132,800
Hawaii	2	2	0	115,900	0	118,000	0
Nevada	1	1	0	4,500	0	4,700	0
Oregon	1	1	0	0	0	0	0
Washington	7	7	0	451,900	0	470,754	0
PAD District V Total	50	48	2	3,054,600	119,600	3,227,223	132,800
United States Total	213	195	18	15,017,968	897,450	15,831,558	993,075

(1) Refineries where distillation units are completely idle but not permanently shutdown on January 1, 1988.

Source: U.S. Energy Information Administration, Petroleum Supply Annual

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1988

District and State	Charge Capacity (Barrels Per Stream Day)						
	Vacuum Distillation	Thermal Operation	Catalytic Cracking (Fresh)	Catalytic Cracking (Recycled)	Catalytic Reforming	Catalytic Hydrocracking	Catalytic Hydrotreating
Delaware	95,000	46,000	65,000	5,000	56,000	19,000	110,000
Florida	11,390	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	3,153
New Jersey	244,100	21,500	251,000	37,000	77,500	0	284,500
New York	27,000	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
Pennsylvania	319,300	0	259,300	12,300	207,690	51,000	475,020
Virginia	29,000	13,500	27,000	2,000	9,500	0	25,000
West Virginia	9,675	0	0	0	3,750	4,440	0
PAD District I Total	735,465	81,000	602,300	56,300	354,440	74,440	897,673
Illinois	337,600	120,700	339,000	7,400	280,300	66,500	548,100
Indiana	204,200	27,500	166,000	6,000	94,500	0	232,800
Kansas	119,650	53,000	124,500	10,000	99,300	3,190	188,300
Kentucky	92,000	57,600	100,000	0	53,500	0	170,300
Michigan	38,500	0	45,000	1,000	36,500	0	55,300
Minnesota	137,000	54,000	78,000	1,000	61,500	0	209,700
North Dakota	0	0	26,000	5,200	12,100	0	17,000
Ohio	185,000	31,200	177,000	25,300	161,600	87,000	190,000
Oklahoma	129,000	27,000	131,000	6,400	90,000	5,000	170,000
Tennessee	10,000	0	30,000	0	10,000	0	33,500
Wisconsin	20,500	0	9,700	1,000	8,000	0	14,800
PAD District II Total	1,273,450	371,000	1,226,400	63,300	907,300	161,690	1,829,800
Alabama	50,000	12,000	0	0	32,000	0	63,300
Arkansas	23,300	0	18,500	775	9,000	0	18,500
Louisiana	1,157,700	563,500	923,800	35,800	520,500	149,000	1,164,400
Mississippi	273,950	70,500	72,000	9,000	95,800	68,000	253,800
New Mexico	13,900	0	27,100	6,100	19,200	0	29,200
Texas	1,843,700	377,900	1,602,500	135,200	1,134,200	276,000	3,082,450
PAD District III Total	3,362,550	1,023,900	2,643,900	186,875	1,810,700	493,000	4,611,650
Colorado	23,000	0	23,500	1,000	17,500	0	27,500
Montana	53,250	9,900	52,100	6,600	37,800	4,900	121,400
Utah	45,380	8,500	54,800	10,600	28,550	2,000	39,250
Wyoming	75,000	9,000	62,000	12,200	32,250	0	48,800
PAD District IV Total	196,630	27,400	192,400	30,400	116,100	6,900	236,950
Alaska	6,000	0	0	0	12,000	9,000	0
California	1,329,150	496,000	637,150	22,050	558,950	391,100	1,387,430
Hawaii	58,000	13,000	22,000	3,000	12,000	15,900	15,500
Nevada	2,500	0	0	0	0	0	0
Oregon	16,000	0	0	0	0	0	0
Washington	218,500	68,000	100,000	19,500	119,800	52,000	190,800
PAD District V Total	1,630,150	577,000	759,150	44,550	702,750	466,000	1,593,730
United States Total	7,198,245	2,080,300	5,424,150	381,425	3,891,290	1,202,030	9,169,803

Source: U.S. Energy Information Administration, Petroleum Supply Annual.

Section VIII
Table 8

OPERATING REFINERIES WORLDWIDE
(Barrels per Calendar Day)
(as of January 1, 1987)

Area/ Country	Number of Plants	Crude Capacity	Vaccuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro-cracking	Catalytic Hydro-refining	Catalytic Hydro-treating
Canada	27	1,759,700	602,600	76,100	370,300	345,100	150,800	23,200	704,950
Caribbean	8	1,392,300	580,300	125,000	79,000	183,340	15,000	244,500	496,950
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	121,000	59,300	--	12,000	5,800	15,000	10,000	15,700
Trinidad	2	300,000	171,000	18,000	25,000	31,000	--	104,500	41,800
Virgin Islands	1	600,000	190,000	40,000	--	125,000	--	130,000	290,000
Latin America	70	5,524,740	2,333,710	454,400	1,043,320	264,218	41,900	275,600	819,993
Brazil	13	1,321,100	685,200	41,100	321,900	21,600	--	--	132,700
Mexico	9	1,349,000	600,700	82,000	267,000	137,800	18,000	--	486,000
Venezuela	7	1,224,700	551,500	122,000	179,400	6,000	--	275,600	--
Europe	125	14,192,863	3,739,519	1,632,290	1,538,600	2,042,058	259,500	1,906,593	4,283,017
France	15	1,834,050	427,650	167,400	252,300	239,300	13,500	277,900	504,400
Germany (West)	19	1,719,800	537,300	269,400	186,200	317,000	96,200	326,700	690,950
Italy	21	2,678,700	708,700	345,130	276,000	296,600	55,000	298,600	591,400
Netherlands	7	1,400,800	253,370	148,710	125,500	150,400	30,000	183,200	511,820
Spain	10	1,305,000	291,800	124,000	92,500	187,100	15,000	156,100	284,000
United Kingdom	15	1,779,700	625,090	166,000	345,500	367,500	19,000	131,600	770,590
Middle East	42	4,357,097	1,085,214	236,999	146,260	447,925	386,810	607,329	689,460
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	618,000	217,000	--	30,000	51,000	159,000	337,000	36,000
Saudi Arabia	6	1,125,000	67,655	26,000	10,000	86,900	68,100	39,000	207,000
Asia-Pacific	106	10,400,180	2,618,577	471,043	868,908	1,093,230	226,630	1,812,430	3,153,680
India	12	991,070	331,007	104,730	129,408	26,690	6,500	13,800	71,820
Japan	46	4,790,050	1,532,940	80,520	502,750	561,420	50,950	1,497,500	1,943,910
Korea	6	862,000	35,500	30,000	--	63,200	7,000	21,000	95,000
Singapore	5	961,000	170,500	133,000	--	50,600	44,200	76,700	288,400
Africa	44	2,489,563	390,617	83,170	131,100	280,477	34,000	105,100	470,904
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	7	452,110	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	14,582	--	--	37,226
South Africa	5	388,500	177,000	59,500	81,400	57,800	18,000	66,300	125,150
TOTAL	422	40,116,443	11,350,537	3,079,002	4,177,488	4,656,348	1,114,640	5,974,752	10,618,954

Source: Oil and Gas Journal, "Worldwide Report" issue, December 30, 1986.

Section VIII
Table 8a

OPERATING REFINERIES WORLDWIDE
(Barrels per Calendar Day)
(as of January 1, 1988)

Area/ Country	Number of Plants	Crude Capacity	Vaccuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro- cracking	Catalytic Hydro- refining	Catalytic Hydro- treating
Canada	27	1,868,900	654,650	78,150	385,550	368,650	189,550	23,200	755,580
Caribbean	9	1,339,300	605,300	165,000	79,000	187,750	15,000	244,500	496,950
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	123,000	59,300	--	12,000	5,800	15,000	10,000	15,700
Trinidad	2	300,000	171,000	18,000	25,000	31,000	--	104,500	41,800
Virgin Islands	1	545,000	215,000	80,000	--	125,000	--	130,000	290,000
Latin America	67	5,648,548	2,428,735	484,700	1,093,335	289,118	41,900	296,100	544,753
Brazil	13	1,407,300	698,200	33,800	350,500	24,800	--	--	133,400
Mexico	9	1,354,000	600,700	82,000	267,000	157,800	18,000	--	207,000
Venezuela	6	1,201,100	560,600	138,000	193,100	6,000	--	296,100	--
Europe	120	14,279,635	4,718,469	1,781,130	1,729,350	2,082,262	261,500	1,964,670	4,315,658
France	14	1,940,600	678,600	163,550	288,800	258,700	13,500	262,300	552,400
Germany(W)	16	1,647,800	619,800	286,400	174,700	307,100	96,200	326,700	652,150
Italy	19	1,563,100	723,700	388,400	277,400	289,600	55,000	301,900	596,700
Netherlands	7	1,381,000	401,370	151,560	125,500	157,400	30,000	148,200	522,400
Spain	10	1,305,000	374,800	178,000	143,500	189,000	15,000	190,500	283,000
United Kingdom	15	1,802,700	806,090	152,000	392,000	367,500	21,000	115,600	776,590
Middle East	42	4,821,817	1,167,746	225,300	207,760	553,166	386,510	608,429	661,442
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	628,000	217,000	--	30,000	51,000	159,000	338,100	36,000
Saudi Arabia	7	1,375,000	271,655	27,000	76,000	178,000	65,100	39,000	314,000
Asia-Pacific	104	10,310,652	3,017,840	395,700	845,370	1,080,240	246,250	1,752,330	3,231,240
India	12	1,058,742	327,570	113,900	133,470	26,690	--	13,800	77,890
Japan	43	4,566,850	1,675,940	82,520	557,150	533,940	50,950	1,393,200	2,083,660
Korea	5	820,000	33,400	30,000	--	59,450	7,000	21,000	92,800
Singapore	5	858,000	256,100	137,700	--	54,300	48,100	83,600	235,400
Africa	41	2,806,200	344,037	87,170	142,040	296,582	31,500	101,600	555,412
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	7	452,110	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	14,582	--	--	37,226
South Africa	4	433,500	104,000	63,500	84,400	62,800	18,000	77,300	142,150
TOTAL	410	40,862,752	13,091,337	3,334,349	4,582,425	4,857,768	1,172,210	5,241,729	10,761,035

Source: Oil and Gas Journal, "Worldwide Report" issue, December 28, 1987.

Section VIII
Table 8b

OPERATING REFINERIES WORLDWIDE(1)
(Barrels per Calendar Day)
(as of January 1, 1989)

Area/ Country	Number of Plants	Crude Capacity	Vacuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro-cracking	Catalytic Hydro-refining	Catalytic Hydro-treating
Canada	27	1,855,800	657,850	88,200	387,600	369,600	206,350	51,000	771,600
Caribbean	11	1,385,000	605,200	165,000	82,000	194,900	15,000	246,500	502,700
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	123,000	59,300	--	12,000	5,800	15,000	12,000	--
Trinidad	2	300,000	171,000	18,000	28,000	31,000	--	104,500	41,800
Virgin Islands	1	545,000	215,000	80,000	--	125,000	--	130,000	290,000
Latin America	66	5,598,438	2,427,796	490,600	1,105,710	287,560	41,900	546,100	529,419
Brazil	13	1,407,300	698,000	33,800	350,500	24,800	--	--	133,400
Mexico	9	1,354,000	600,700	82,000	267,000	157,800	18,000	250,000	207,000
Venezuela	6	1,201,100	560,000	138,000	193,100	6,000	--	296,100	--
Europe	118	13,946,005	4,588,919	1,733,230	1,833,840	1,978,012	274,000	1,943,770	4,299,018
France	14	1,875,970	684,500	152,850	319,200	247,000	13,500	264,900	523,000
Germany (W)	15	1,518,200	608,700	289,500	179,400	275,100	96,200	296,400	624,200
Italy	19	2,450,200	590,100	360,400	278,300	284,300	59,000	337,100	579,200
Netherlands	7	1,380,700	399,370	154,360	125,500	166,000	30,000	148,200	522,620
Spain	10	1,285,000	388,800	173,000	164,000	171,600	15,000	192,100	278,900
United Kingdom	15	1,803,100	806,840	152,000	442,000	307,500	21,000	115,600	776,590
Middle East	43	5,076,430	1,471,957	297,684	222,788	538,519	403,080	486,992	1,108,999
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	817,000	338,000	54,000	42,000	33,000	170,000	205,000	263,000
Saudi Arabia	7	1,375,000	280,655	32,000	76,000	180,900	70,100	40,000	340,000
Asia-Pacific	102	10,064,786	3,005,841	506,490	987,503	1,096,190	324,450	1,756,360	3,010,560
India	12	1,051,441	332,996	110,670	133,953	26,030	6,000	13,800	77,630
Japan	41	4,362,750	698,940	82,800	596,950	531,650	101,750	1,370,280	1,973,740
Korea	6	880,000	67,000	49,000	--	62,000	29,000	21,000	110,800
Singapore	5	852,000	256,000	137,700	--	58,000	48,100	80,600	243,400
Africa	44	2,786,987	397,217	94,170	174,000	331,182	31,500	105,700	551,248
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	8	489,203	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	13,982	--	--	37,126
South Africa	4	433,500	104,000	63,500	84,400	62,800	18,000	77,300	142,150
TOTAL	411	40,713,446	13,154,780	3,375,424	4,793,451	4,796,013	1,296,280	5,136,422	10,773,544

(1) Excluding the United States.

Source: Oil and Gas Journal, "Worldwide Report" issue, December 26, 1988.

Section VIII
Table 9

NELSON REFINERY OPERATING COST INDEXES
(1956 = 100)

Year	Fuel and Power Cost	Wage Rate	Productivity of labor	Labor Cost	Investment Related	Chemicals and Catalyst	Nelson Operating Indexes Refineries	Nelson Operating Indexes Processes
1956	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1957	115.1	104.1	98.1	106.1	105.4	102.2	106.7	107.7
1958	102.1	105.4	100.3	105.0	109.5	104.4	105.8	105.8
1959	103.5	111.5	109.0	102.3	113.7	107.8	106.8	106.0
1960	109.9	113.0	112.9	100.3	116.9	114.3	108.8	107.2
1961	106.7	119.2	122.3	97.5	119.2	103.2	106.7	106.4
1962	100.9	123.9	131.8	93.9	121.7	96.7	103.7	103.6
1963	104.4	129.1	142.7	90.5	115.2	95.6	100.8	100.6
1964	102.8	132.8	149.1	89.1	114.5	99.0	100.2	100.5
1965	106.1	138.8	157.2	88.3	116.0	119.3	104.6	106.2
1966	105.6	145.4	165.9	87.7	103.2	130.9	102.8	100.3
1967	104.7	152.4	165.1	92.3	103.6	128.6	104.1	101.2
1968	103.8	158.0	173.1	91.8	103.6	124.3	103.5	101.3
1969	107.1	171.3	187.6	91.3	104.3	125.9	104.3	102.5
1970	129.2	183.1	179.9	101.8	115.7	127.4	113.9	117.6
1971	166.4	194.9	185.6	105.0	115.7	120.1	117.4	133.3
1972	166.8	210.0	197.0	107.1	162.3	112.2	118.5	147.0
1973	186.8	221.2	214.9	102.9	193.0	117.3	125.7	168.0
1974	310.5	243.9	201.5	121.1	215.8	153.2	159.7	222.5
1975	376.8	273.9	206.0	133.0	246.5	186.7	189.3	258.5
1976	384.5	314.3	216.2	145.5	252.6	195.2	209.3	267.1
1977	430.5	346.2	231.4	149.6	263.6	184.4	228.2	287.8
1978	422.4	388.6	229.4	169.6	280.7	191.8	243.2	297.0
1979	605.7	424.8	222.5	191.1	300.2	216.6	278.3	374.4
1980	810.5	439.9	226.3	200.6	325.2	229.2	312.7	457.5
1981	1,016.0	512.8	188.8	271.9	357.2	237.7	373.3	562.2
1982	931.9	574.7	178.6	321.8	384.1	234.1	396.6	557.2
1983	913.8	621.9	186.7	334.5	415.3	231.3	412.9	565.5
1984	968.3	629.9	204.5	308.0	436.6	233.4	417.4	584.2
1985	878.9	642.3	219.7	293.4	445.8	222.9	406.8	551.7
1986	548.8	651.8	253.8	259.4	460.0	206.7	369.0	430.8
1987	554.1	663.2	261.8	253.5	473.2	192.8	371.8	435.6

Source: Oil and Gas Journal.

Section VIII
Table 10

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
PAD District I					
American Refining Group, Inc.	Indianaola, Pa.	180	03/84	12/85	3
Amoco Oil Co.	Baltimore, Md.	15,000	01/82	03/82	25+
Ashland Oil Inc.	Buffalo, N.Y.	64,000	07/82	12/84	36+
Ashland Oil Inc.	Freedom, Pa.	6,800	04/85	12/85	37+
ATC Petroleum Inc.	Newington, N.H.	13,400	07/81	12/81	7
ATC Petroleum Inc.	Wilmington, N.C.	11,900	07/81	12/81	8
Chevron U.S.A. Inc.	Baltimore, Md.	14,200	N.A.	N.A.	38
Elk Refining Co. (division of Pennzoil Co. Inc.)	Falling Rock, W.Va.	5,600	12/82	12/82	25+
Manatee Energy Co.	Port Manatee, Fl.	28,400	05/81	10/81	2
Mobil Oil Corp.	Buffalo, N.Y.	43,000	05/81	07/81	25+
Quaker State Oil Refining Corp.	Emlenton, Pa.	0	12/83	12/83	25+
Virginia Oil & Refining Co., Inc.	Jonesville, Va.	1,000	N.A.	N.A.	2
TOTAL PAD I		203,480			
PAD District II					
Allied Materials Corp.	Stroud, Ok.	7,600	12/84	02/85	37+
Amoco Oil Co.	Sugar Creek, Mo.	104,000	05/82	06/82	25+
Amoco Oil Co.	Wood River, Il.	104,000	05/81	10/81	25+
Ashland Oil Inc.	Findlay, Oh.	20,400	02/82	12/84	36+
Ashland Oil Inc.	Louisville, Ky.	25,200	04/82	12/84	36+
B-T Energy Corp.	Louisville, Ky.	3,000	11/84	11/85	3
Champlin Petroleum Co.	Enid, Ok.	53,800	06/83	12/83	25+
Chevron U.S.A. Inc.	Cincinnati, Oh.	43,700	N.A.	N.A.	38+
Conoco Inc.	Wrenshall, Mn.	23,500	05/81	09/81	5
CRA, Inc.	Scottsbluff, Nb.	5,600	05/82	06/82	25+
Dillman Oil Recovery Inc.	Oblong, Il.	1,200	01/81	02/82	4+
Dow Chemical U.S.A.	Bay City, Mi.	20,000	05/80	09/81	25+
E-Z Serv Refining Inc.	Shallow Water, Kn.	9,500	04/81	02/82	25+
Energy Cooperative Inc.	East Chicago, In.	126,000	05/81	06/82	25+
Energy Development	Crossville, Il.	1,000	02/81	04/81	22
Flying J Petroleum Inc.	Williston, N.D.	4,600	N.A.	N.A.	32
Gladieux Refinery Inc.	Fort Wayne, In.	19,000	N.A.	N.A.	27+
Gulf Oil Corp.	Toledo, Oh.	50,300	06/81	11/81	25+
Hudson Refining Co. Inc.	Cushing, Ok.	19,000	12/82	11/83	6
Indiana Refining Inc.	Princeton, In.	5,000	12/80	02/81	23
Industrial Fuel and Asphalt of Indiana Inc.	Hammond, In.	7,600	12/81	06/82	25+
Lakeside Refining Co.	Kalamazoo, Mi.	5,600	N.A.	N.A.	39
Mid-America Refining Co. Inc.	Chanute, Kn.	3,000	03/81	07/82	25+
Mobil Oil Corp.	Augusta, Kn.	50,000	09/83	09/83	25+
Northland Oil and Refining Co.	Dickinson, N.D.	5,000	02/81	02/82	7
Oklahoma Refining Co.	Cyril, Ok.	12,750	12/84	12/84	36+
Okmulgee Refining Co.	Okmulgee, Ok.	25,000	06/82	12/82	25+
Phillips Petroleum Co.	Kansas City, Kn.	80,000	08/82	09/82	25+
Texaco Inc.	Lockport, Il.	72,000	04/81	10/81	25+
Texaco Refining and Marketing Inc.	Lawrenceville, Il.	79,000	04/85	12/85	37+
Texas American Petrochemical Inc.	West Branch, Mi.	11,500	09/81	02/82	25+
Tonkawa Refining Co.	Arnett, Ok.	12,000	06/84	09/84	16
Tosco Corp.	Duncan, Ok.	47,000	06/83	12/84	35
Wireback Oil Co.	Plymouth, Ok.	1,800	02/81	03/81	25+
TOTAL PAD II		1,058,650			

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 10a

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
PAD District III					
Adobe Refining Co., div. of Funding Systems Refining Corp.	La Blanca, Tx.	5,200	11/81	12/81	25+
Bayou State Oil Corp.	Hosston, La.	3,000	01/81	03/82	25+
Brio Refining Inc.	Friendswood, Tx.	12,500	09/82	12/82	4
Bronco Refining Co.	Houston, Tx.	2,250	04/81	07/82	1
Carbonit Refining Co.	Hearne, Tx.	11,000	02/81	12/81	6
Caribou-Four Corners Inc.	Farmington, N.M.	2,200	05/82	08/84	19
Celeron Oil and Gas Co.	Mermentau, La.	11,000	02/83	08/84	6
Clark Oil & Refining Corp.	Mt. Airy, La.	0	N.A.	N.A.	39
Clinton Manges	Palestine, Tx.	6,000	07/81	07/82	25+
Conoco Inc.	Alvin/Texas City, Tx.	33,274	10/85	12/85	22
Copano Refining Co.	Ingleside, Tx.	11,100	09/81	02/82	4
Damson Gas Processing Corp.	White Deer, Tx.	0	02/85	05/85	12
Dorchester Refining Co.	Mt. Pleasant, Tx.	26,500	09/84	12/84	36+
Dow Chemical U.S.A.	Freeport, Tx.	190,000	08/81	06/82	1
Eagle Refining Corp.	Jacksboro, Tx.	1,800	03/81	07/82	1
Eddy Refining Co.	Houston, Tx.	3,250	10/84	11/84	36+
Erickson Refining Corp.	Pt. Neches, Tx.	30,000	12/81	08/83	4
Evangeline Refining Co.	Jennings, La.	4,500	12/82	12/82	25+
Flint Chemical Co.	San Antonio, Tx.	1,500	01/85	03/85	23
Giant Industries Inc.	Farmington, N.M.	13,500	05/82	11/82	7
Gulf Oil Corp.	Venice, La.	28,700	04/81	12/81	13
Independent Refining Corp.	Winnie, Tx.	50,000	10/81	08/83	23
International Processors	St. Rose, La.	28,356	09/82	02/85	6
Lake Charles Refining Co.	St. Charles, La.	28,000	04/81	02/82	2
Longview Refining Co.	Longview, Tx.	14,000	12/81	04/82	25+
MacMillan Petroleum Co.	Norphlet, Ar.	5,800	N.A.	N.A.	39
Mallard Resources Inc.	Gueydan, La.	7,400	11/83	12/83	4
McTan Refining Corp.	St. James, La.	19,300	07/81	08/83	6
Mid-Gulf Energy Corp.	Ingleside, Tx.	39,400	10/83	05/84	6
Natchez Refining Co.	Natchez, Ms.	16,000	06/82	09/82	2
Petraco-Valley Oil Refining Co.	Brownsville, Tx.	12,300	03/83	12/83	5
Petromax Refining Co.	Houston, Tx.	2,000	N.A.	N.A.	4
Placid Oil Co.	Mont Belvieu, Tx.	8,500	01/82	07/82	2
Port Petroleum Inc.	Stonewall, La.	3,200	12/83	02/84	4
Quintana Petrochemical Co.	Corpus Christi, Tx.	33,300	07/84	09/84	30
Quitman Refining Co.	Quitman, Tx.	6,600	04/82	06/82	4
Rio Grande Crude Refining	Brownsville, Tx.	9,500	06/81	06/82	3
Rio Grande Recovery Systems Inc.	Brownsville, Tx.	1,000	05/81	02/82	2
Schulze Processing Inc.	Tallulah, La.	1,760	05/81	08/82	4
Shepard Oil Co.	Jennings, La.	10,000	05/81	02/82	4
Shore, Inc.	Kilgore, Tx.	550	03/83	07/83	3
Sooner Refining Co.	Darrow, La.	8,000	01/82	02/82	2
Southern Union Refining Co.	Monument, N.M.	5,400	01/81	10/81	25+
Southern Union Refining Co.	Lovington, N.M.	36,100	08/84	11/84	8
Southland Oil Co.	Yazoo City, Ms.	5,500	02/81	07/81	25+

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
Tesoro Petroleum Corp.	Carrizo Springs, Tx.	26,100	07/84	12/84	27
T & S Refining Co.	Jennings, La.	10,500	07/81	03/82	2
Texaco Refining and Marketing Inc.	Amarillo, Tx.	20,000	04/85	12/85	37+
Texas Refining Co.	Midland, Tx.	2,500	04/81	06/81	1
Texas Standard Refining Inc.	Houston, Tx.	1,800	01/81	10/81	*
Thriftway Oil Co.	Graham, Tx.	1,184	04/81	11/83	25+
Tipperary Refining Co.	Ingleside, Tx.	7,320	01/82	03/82	4
Tropicana Energy Co.	Ft. Worth (Euless), Tx.	4,650	12/83	12/85	19
Wickett Refining Co.	Wickett, Tx.	8,000	01/76	02/82	25+
TOTAL PAD III		831,294			
PAD District IV					
Caribou-Four Corners Inc.	Woods Cross, Ut.	8,400	12/82	12/84	21
C & H Refinery Inc.	Lusk, Wy.	180	01/81	02/82	25+
Gary Refining Corp.	Fruita, Co.	15,200	02/85	10/85	19
Glacier Park Co.	Osage, Wy.	10,000	02/81	03/82	4
Glenrock Refinery Inc.	Glenrock, Wy.	6,000	04/81	09/81	5
Husky Oil Co.	Cody, Wy.	11,500	06/82	09/82	25+
Kenco Refining Inc.	Wolf Point, Mt.	4,700	10/85	12/85	8
Morrison Petroleum Co.	Woods Cross, Ut.	6,000	[illegible]2/85	12/85	11
Sage Creek Refining Co.	Cowley, Wy.	1,000	01/82	06/82	17
Silver Eagle Oil Co.	LaBarge, Wy.	3,000	N.A.	N.A.	13
Southwestern Refining Co.	La Barge, Wy.	1,040	04/81	08/81	7
Texaco Inc.	Casper, Wy.	21,000	03/82	07/82	25+
TOTAL PAD IV		88,020			
PAD District V					
Anchor Refining Co. Inc.	McKittrick, Ca.	9,000	11/82	02/84	6
Arizona Fuels Corp.	Fredonia, Az.	6,000	02/83	09/83	11
Beacon Oil Co.	Hanford, Ca.	17,300	N.A.	N.A.	27
Chevron U.S.A. Inc.	Bakersfield, Ca.	26,000	N.A.	N.A.	38+
Coastal Petroleum Refiners Inc.	Bakersfield, Ca.	10,000	06/85	12/85	6
ECO Petroleum Inc.	Long Beach, Ca.	0	07/81	03/84	8
Demenno-Kerdoon	Compton, Ca.	10,000	01/83	08/83	6
Golden Eagle Refining Co., Inc.	Carson, Ca.	16,170	11/84	02/85	37+
Marlex Oil & Refining Co.	Los Angeles, Ca.	21,100	01/84	03/84	7
Quad Refining Corp.	Bakersfield, Ca.	7,000	08/80	10/81	2
Road Oil Sales Inc.	Bakersfield, Ca.	6,000	01/81	12/81	9
Sabre Refining Inc.	Bakersfield, Ca.	10,000	N.A.	N.A.	16
Tosco Corp.	Bakersfield, Ca.	38,800	11/83	11/84	33
United Independent Oil Co.	Tacoma, Wa.	730	07/80	03/82	7
U.S.A. Petrochemical Corp.	Ventura, Ca.	24,000	12/84	12/84	7
Western Oil & Refining	Long Beach, Ca.	19,200	N.A.	N.A.	11
TOTAL PAD V		221,300			
TOTAL UNITED STATES		2,402,744			

* Less than one year.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 11

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY
(Thousands of Barrels per Day)

1960		1970		1980	
Company	Capacity	Company	Capacity	Company	Capacity
Standard of New Jersey	961.7	Standard of New Jersey	1,087.0	Exxon	1,557.0
Texaco	724.0	Standard of Indiana	1,040.4	Standard of California	1,383.7
Socony-Mobil	716.7	Texaco	1,029.5	Standard of Indiana	1,238.0
Standard of Indiana	675.4	Shell	1,011.5	Shell	1,123.4
Standard of California	647.5	Standard of California	969.0	Texaco	1,059.0
Shell	594.0	Mobil	794.9	Gulf(1)	949.2
Gulf	500.6	Gulf(1)	751.6	Mobil	835.7
Sinclair	473.0	Atlantic Richfield	681.2	Atlantic Richfield	811.2
Cities Service	293.0	Sun	455.0	Sun(2)	521.5
Phillips	274.3	Union	444.0	Marathon	513.0
Sun	255.0	Standard of Ohio	439.0	Union	490.0
Tidewater	253.5	Phillips	398.0	Ashland	462.9
Continental	216.0	Ashland	318.3	Standard of Ohio	452.0
Atlantic	210.0	Continental	299.0	Conoco	448.1
Pure	187.0	Cities Service	281.0	Phillips	397.0
Union	181.0	Getty	207.0	Cities Service	291.0
Sunray Mid-Continent	171.0	Marathon	205.0	Union Pacific	283.8
Standard of Ohio	170.5	Coastal States Gas	135.0	Coastal	278.0
Ashland	168.5	Amerada Hess	125.0	Getty	261.5
Richfield	165.0	Union Pacific	122.5	Tosco	260.5
U.S. TOTAL	9,629.7	U.S. TOTAL(3)	12,811.0	U.S. TOTAL(3)	18,279.3

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(1) Includes volumes from Gulf's Bayamon refinery in Puerto Rico.
(2) Includes volumes from Sun's Yabucoa refinery in Puerto Rico.
(3) Includes Puerto Rico.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

Section VIII
Table 11a

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY
(Thousands of Barrels per Day)

1983		1984		1985	
Company	Capacity	Company	Capacity	Company	Capacity
Standard of California	1,296.5	Chevron(5)	2,029.3	Chevron(1)(5)	1,879.2
Exxon	1,200.0	Exxon	1,182.0	Exxon	1,200.0
Standard of Indiana	1,011.0	Shell	1,005.0	Shell	1,019.6
Shell	1,005.2	Standard of Indiana	986.0	Amoco (Std. of Ind.)	982.0
Gulf(1)	849.2	Texaco(6)	939.0	Texaco	873.2
Texaco	815.0	Mobil	750.0	Mobil	755.0
Mobil	750.0	Atlantic Richfield	741.0	Standard Oil (Ohio)	664.5
Atlantic Richfield	701.0	U.S. Steel	492.5	Atlantic Richfield	655.0
U.S. Steel	492.5	Standard of Ohio	456.0	U.S. Steel	492.5
Standard of Ohio	456.0	Sun(2)	443.0	Unocal	474.5
Sun(2)	443.0	DuPont	429.8	Sun(2)	443.0
DuPont	415.8	Ashland	353.3	DuPont	400.0
Unocal(3)	370.5	Unocal	339.0	Ashland	346.5
Ashland	353.3	Phillips	300.0	Phillips	300.0
Southland(Citgo)(4)	297.0	Southland	297.0	Southland	297.0
Phillips	295.0	Koch	262.0	Koch Industries	280.0
Getty	258.6	Union Pacific	217.0	Coastal	261.3
Koch	242.0	Coastal	171.3	Union Pacific	220.0
Union Pacific	215.0	Kerr-McGee	164.8	Kerr-McGee	164.8
Coastal	171.3	Tosco	164.5	Total	152.0
U.S. TOTAL(7)	14,949.1	U.S. TOTAL(7)	14,481.6	U.S. TOTAL(7)	14,761.5

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(1) Includes volumes from Gulf's Bayamon refinery in Puerto Rico.
(2) Includes volumes from Sun's Yabucoa refinery in Puerto Rico.
(3) Unocal Corporation is the parent of Union Oil Company of California.
(4) Southland acquired the refining, marketing and transportation sections of Citgo Petroleum Corp., a subsidiary of Occidental, on September 1, 1983.
(5) Standard Oil of California acquired the Gulf Corporation on June 15, 1984 and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure reflects this acquisition which also includes volumes from a refinery in Bayamon, Puerto Rico.
(6) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figure reflects this acquisition.
(7) Includes Puerto Rico.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1985, Discussion Paper #014R.

Section VIII
Table 11b

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY(1)
(Thousands of Barrels per Day)

1986		1987	
Company	Capacity	Company	Capacity
Chevron(2)	1,845.0	Chevron	1,718.6
Exxon	1,143.5	Exxon	1,169.0
Shell	1,045.8	Shell	1,065.7
Amoco	967.0	Amoco	939.0
Texaco	886.0	Texaco	881.5
Mobil	755.0	Mobil	755.0
ARCO (Atlantic Richfield)	673.0	ARCO	668.0
Standard Oil	667.6	BP America (Standard Oil)(4)	667.6
USX (U.S. Steel)	513.0	USX	513.0
Unocal	490.0	Unocal	497.0
Sun(3)	443.0	Sun(3)	460.0
DuPont	393.2	DuPont	394.3
Ashland	346.5	Ashland	346.5
Coastal	318.3	Phillips	305.0
Phillips	305.0	Coastal	290.4
Citgo (Southland)	297.0	Koch	280.0
Koch Industries	280.0	Petroleos de Venezuela(5)	226.1
Union Pacific	218.4	Total Petroleum	191.1
Kerr-McGee	155.8	Kerr-McGee	164.8
Solomon (Philbro)	154.4	Solomon	155.7
U.S. TOTAL	15,067.8	U.S. TOTAL	15,139.0

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(1) Operating capacities of refineries in the U.S. and Puerto Rico as of January 1, 1987. Excludes Guam and Virgin Island operations.

(2) Includes 38 mbd from a refinery in San Juan, Puerto Rico.

(3) Includes 85 mbd from a refinery in Yabucoa, Puerto Rico.

(4) BP America was formed in 1987 through the acquisition of The Standard Oil Company by BP North America Inc.

(5) Petroleos de Venezuela, the Venezuelan national oil company, owns one-half of Citgo Petroleum and one-half of Champlin Refining Company. In 1987, Citgo's operable refining capacity averages 297,000 b/d, and Champlin's averaged 155,200 b/d.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion Paper #014R.

U.S. GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION
(As of January 1)

	1984			1985			1986		
State	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gas/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)
AL	5	182.0	599.6	5	182.0	403.2	5	167.0	401.2
AK	2	62.0	56.8	2	62.0	50.3	2	82.0	39.0
AR	3	130.0	82.9	5	1,005.0	104.6	6	962.5	104.6
CA	37	1,483.1	1,280.1	34	1,167.6	1,267.3	36	1,066.0	1,038.3
CO	44	858.0	1,008.7	43	876.2	1,085.2	47	1,004.9	1,038.3
FL	3	961.5	374.0	3	934.0	353.9	3	799.0	454.8
IL	2	551.5	985.8	2	551.5	985.2	0	0	0
KS	25	4,901.5	1,942.4	27	5,124.0	2,480.2	28	5,646.0	2,280.8
KY	2	897.6	431.2	2	916.0	440.9	3	916.0	481.0
LA	106	22,194.5	9,852.3	97	22,983.5	11,253.5	94	20,366.4	10,085.2
MI	6	449.4	926.4	9	675.4	1,095.0	26	4,734.9	963.8
MS	7	1,005.0	51.6	6	995.0	55.1	6	995.0	55.5
MT	8	58.0	95.8	9	70.0	113.1	9	70.0	120.0
NE	2	13.5	11.9	2	13.5	11.6	2	13.5	10.5
NM	44	3,683.3	3,845.4	39	3,255.2	3,954.7	34	3,141.6	3,461.7
ND	9	306.8	520.3	11	314.2	663.0	10	284.3	537.6
OK	104	4,857.6	5,570.3	110	4,884.9	6,243.9	108	4,989.8	5,692.2
TX	415	23,504.6	24,782.4	399	21,071.0	26,638.5	384	19,630.8	26,548.6
UT	10	520.5	372.3	11	521.5	377.6	11	531.5	340.9
WV	6	410.0	698.0	6	416.0	715.0	7	430.0	794.4
WY	40	1,912.6	1,683.1	39	1,815.2	1,801.6	41	1,897.9	1,627.7
TOTAL U.S.	880	68,943.0	55,171.3	861	67,883.7	60,094.3	862	67,729.1	56,378.1

(1) Products include ethane, propane, butane, normal or unsplit butane LP-gas mix, raw NGL mix, debut natural gasoline and other.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

WORLD GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION(1)
(As of January 1)

Country	1984 No. of Plants	1984 Gas Capacity (MMcfd)	1984 Product Production(1) (000 gal/day)	1985 No. of Plants	1985 Gas Capacity (MMcfd)	1985 Product Production(1) (000 gal/day)	1986 No. of Plants	1986 Gas Capacity (MMcfd)	1986 Product Production(1) (000 gal/day)
Abu Dhabi	4	2,048.0	2,790.3	5	2,498.0	1,179.3	5	2,498.0	1,179.3
Algeria	4	5,335.2	6,082.0	4	5,335.2	6,082.0	4	5,335.2	6,082.0
Argentina	11	1,715.9	1,656.2	11	1,715.9	1,656.2	11	1,715.9	1,701.7
Australia	4	1,707.0	1,932.0	4	1,707.0	1,920.0	5	2,070.0	6,284.0
Austria	2	5.7	0.9	2	5.7	0.3	2	5.7	0
Bahrain	1	127.7	353.8	1	145.0	354.9	1	143.0	335.4
Bangladesh	0	0	0	8	460.0	16.2	8	460.0	16.2
Bolivia	2	474.0	32.6	2	474.0	32.6	2	474.0	32.6
Brazil	5	295.3	448.6	5	312.0	598.3	6	369.4	711.7
Brunei	1	48.0	49.6	2	998.0	314.4	2	998.0	319.6
Canada	346	19,465.3	14,209.1	385	22,001.8	15,133.4	403	22,807.9	17,381.7
Chile	2	445.0	436.1	2	470.0	452.0	2	470.0	452.0
China, Taiwan	4	271.0	132.5	4	271.0	132.5	4	271.0	110.3
Colombia	2	125.0	187.0	2	125.0	187.0	2	125.0	157.9
Denmark	0	0	0	1	405.0	0	1	405.0	0.9
Dominican Rep.	1	0	277.2	1	0	277.2	1	0	277.2
Dubai	0	0	0	1	330.0	1,176.0	1	330.0	1,016.4
Ecuador	2	0	11.5	2	0	11.5	2	0	11.5
Egypt	4	553.0	1,797.1	7	826.0	928.3	7	969.0	1,122.2
France	1	1,024.0	761.0	1	900.0	740.0	1	777.0	666.0
Germany	5	542.9	0	5	542.9	0	5	542.9	0
Greece	1	9.8	16.0	2	39.0	83.0	1	10.5	85.0
Hungary	12	732.7	831.4	12	788.5	911.2	12	855.9	1,068.4
Indonesia	5	587.8	1,005.2	10	933.2	1,639.9	10	884.3	1,446.5
Italy	14	5,560.0	491.9	16	7,101.0	220.0	16	7,101.0	220.0
Kuwait	1	1,680.0	1,772.0	1	1,680.0	1,772.0	1	1,680.0	1,772.0
Libya	7	1,851.0	6,165.8	7	1,851.0	1,165.8	7	1,851.0	6,165.8
Malaysia	0	0	0	1	250.0	1,111.0	2	282.0	406.0
Mexico	9	3,807.0	10,679.8	9	3,807.0	10,679.8	10	4,334.0	10,017.3
Netherlands	1	330.0	6.3	1	440.0	6.0	1	440.0	4.2
New Zealand	1	96.0	26.5	1	96.0	34.7	1	96.0	34.7
Norway	0	0	0	1	350.0	160.0	2	950.0	368.4
Pakistan	5	1,215.0	32.2	5	950.0	62.4	5	950.0	62.4
Peru	3	50.0	44.2	3	70.0	28.1	2	70.0	38.7
Qatar	2	580.0	696.5	2	578.7	1,777.9	2	580.0	1,096.0
Saudi Arabia	5	4,300.0	1,176.0	5	4,300.0	1,176.0	5	4,300.0	1,176.0
Sharjah	1	250.0	1,316.0	1	500.0	2,436.0	1	580.0	2,520.0
United Kingdom	5	2,435.0	2,424.3	5	2,235.0	2,418.1	7	2,648.2	2,627.5
Venezuela	14	2,696.0	2,788.6	14	2,696.0	2,788.6	17	4,251.0	2,566.8
TOTAL (ex U.S.)	487	60,363.3	60,630.2	551	68,187.9	64,662.6	577	72,675.9	69,534.3

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(1) Products include ethane, propane, butane, normal or unsplit butane, LP-gas mix, raw NGL mix, debut natural gasoline and other.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

BASIC PETROLEUM DATA BOOK

SECTION IX. IMPORTS

Table 1. The Share of Imports in U.S. Domestic Petroleum Demand

Table 2. Total U.S. Imports of Petroleum and Petroleum Production

Table 3. U.S. Crude Oil Imports by Area

Table 4. U.S. Imports of Crude Petroleum by Country of Origin

Table 5. U.S. Imports of Crude Oil by P.A.D. Districts

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Table 8. Total U.S. Petroleum Imports by Source

Table 9. U.S. Direct Petroleum Imports From Members of the Organization of Arab Petroleum Exporting Countries, September 1973-April 1974

Table 10. World Oil Movements

Table 11. Historical U.S. Imports of Crude Oil and Refined Products: 1918-1946

Section IX
Table 1

THE SHARE OF IMPORTS IN U.S. DOMESTIC PETROLEUM DEMAND
(Thousands of Barrels)

Year	Imports	Domestic Demand For Refined Products	Imports as a % of Demand
1947	159,389	1,989,803	8.0
1948	188,144	2,113,678	8.9
1949	235,559	2,118,250	11.1
1950	310,261	2,392,974	13.0
1951	308,194	2,578,766	11.9
1952	348,507	2,668,134	13.1
1953	377,499	2,776,778	13.6
1954	383,955	2,833,896	13.5
1955	455,564	3,089,348	14.7
1956	525,591	3,214,651	16.3
1957	574,589	3,221,949	17.8
1958	620,589	3,327,993	18.6
1959	649,583	3,477,173	18.7
1960	664,111	3,585,820	18.5
1961	699,666	3,641,280	19.2
1962	759,793	3,796,029	20.0
1963	774,713	3,921,364	19.8
1964	826,736	4,034,236	20.5
1965	900,772	4,202,039	21.4
1966	939,162	4,410,796	21.3
1967	925,991	4,584,526	20.2
1968	1,039,369	4,901,789	21.2
1969	1,155,551	5,159,930	22.4
1970	1,248,062	5,364,473	23.3
1971	1,432,880	5,552,560	25.8
1972	1,735,314	5,990,316	29.0
1973	2,283,493	6,317,303	36.1
1974	2,230,947	6,078,239	36.7
1975	2,210,335	5,957,515	37.1
1976	2,676,411	6,390,750	41.9
1977	3,207,106(1)	6,727,468	47.7
1978	2,993,847(1)	6,879,017	43.5
1979	3,062,053(1)	6,757,077	45.3
1980	2,512,636(1)	6,242,445	40.3
1981	2,095,122(1)	5,861,058	35.7
1982	1,806,165(1)	5,582,938	32.4
1983	1,758,457(1)	5,559,364	31.6
1984	1,917,897(1)	5,755,575	33.3

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(1) Excludes crude oil imports into Strategic Petroleum Reserve: 1977 - 7,540; 1978 - 58,798; 1979 - 23,434; 1980 - 16,067; 1981 - 93,298; 1982 - 60,193; 1983 - 85,285; 1984 - 72,038

Source: U.S. Energy Information Administration; Annual Petroleum Statements.
1981-1984 - U.S. Energy Information Administration; Petroleum Supply Annu

THE SHARE OF IMPORTS IN U.S. DOMESTIC PETROLEUM DEMAND
(Thousands of Barrels)

Year	Imports	Domestic Demand For Refined Products	Imports as a % of Demand
1985	1,806,304(1)	5,740,143	31.5
1986	2,254,019(1)	5,942,429	37.9
1987	2,410,842(1)	6,082,742	39.6
1988	2,606,171(1)	6,284,098	41.5

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(1) Excluded crude oil imports in Strategic Petroleum Reserve: 1985--43,124, 1986--17,563, 1987--26,517, 1988--18,758.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals. 1988--DOE Petroleum Supply Monthly for December.

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

	IMPORTS					Production		
Year	Crude Oil	Unfinished Oils	Plant Condensate	Refined Products	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1947	97,532	(1)	(2)	61,857	159,389	1,856,987	132,173	1,989,160
1948	129,093	(1)	(2)	59,051	188,144	2,020,185	146,721	2,168,906
1949	153,686	(1)	(2)	81,873	235,559	1,841,940	157,086	1,999,026
1950	177,714	(1)	(2)	132,547	310,261	1,973,574	181,961	2,155,535
1951	179,073	(1)	(2)	129,121	308,194	2,247,711	204,754	2,452,465
1952	209,591	(1)	(2)	138,916	348,507	2,289,836	223,515	2,513,351
1953	236,455	(1)	(2)	141,044	377,499	2,357,082	238,579	2,595,661
1954	239,479	(1)	(2)	144,476	383,955	2,314,988	252,133	2,567,121
1955	285,421	(1)	(2)	170,143	455,564	2,484,428	281,371	2,765,799
1956	341,833	(1)	(2)	183,758	525,591	1,617,283	292,727	2,910,010
1957	373,255	(1)	(2)	201,334	574,589	2,616,901	294,990	2,911,891
1958	348,007	(1)	(2)	272,582	620,589	2,448,987	294,749	2,743,736
1959	352,344	23,072	(2)	274,167	649,583	2,574,590	320,757	2,895,347
1960	371,575	16,478	(2)	276,058	664,111	2,574,933	340,157	2,915,090
1961	381,548	25,348	(2)	292,770	699,666	2,621,758	361,689	2,983,447
1962	411,039	32,516	(2)	316,238	759,793	2,676,189	372,705	3,048,894
1963	412,660	31,702	(2)	330,351	774,713	2,752,723	400,886	3,153,609
1964	438,643	32,587	(2)	355,506	826,736	2,786,822	422,471	3,209,293
1965	452,040	33,706	(2)	415,026	900,772	2,848,514	441,556	3,290,070
1966	447,120	35,236	(2)	456,806	939,162	3,027,763	468,635	3,496,398
1967	411,649	35,225	(2)	479,117	925,991	3,215,742	514,456	3,730,198
1968	472,323	29,350	(2)	537,696	1,039,369	3,329,042	550,311	3,879,353
1969	514,114	38,766	(2)	602,671	1,155,551	3,371,751	580,241	3,951,992
1970	483,293	39,261	2,258	723,250	1,248,062	3,517,450	605,916	4,123,366
1971	613,417	45,193	13,321	760,949	1,432,880	3,453,914	617,815	4,071,729
1972	811,135	45,705	31,428	847,046	1,735,314	3,455,368	638,216	4,093,584
1973	1,183,996	50,161	39,344	1,009,992	2,283,493	3,360,903	634,423	3,995,326
1974	1,269,155	44,228	32,364	885,200	2,230,947	3,202,585	616,098	3,818,683

(1) Separate data not available prior to 1959
(2) Separate data not available prior to 1970

SOURCE: U.S. Bureau of Mines, Crude Petroleum, Petroleum Products and Natural Gas Liquids, Annual and December issues

Section IX
Table 2a

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

	IMPORTS					PRODUCTION		
Year	Crude Oil(3)	Unfinished Oils	Plant Condensate	Refined Products(4)	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1975	1,498,181	12,985	26,972	672,197	2,210,335	3,056,779	595,958	3,652,737
1976	1,935,012	11,735	24,408	705,256	2,676,411	2,976,180	587,045	3,563,225
1977	2,414,327	11,239	15,003	774,077	3,214,646	3,009,265	590,455	3,599,720
1978	2,319,826	9,913	6,017	716,889	3,052,645	3,178,216	572,086	3,750,302
1979	2,379,541	21,372	4,729	680,825	3,086,487	3,121,310	578,023	3,699,333
1980	1,926,162	20,015	3,781	598,745	2,548,703	3,146,365	575,787	3,722,152
1981	1,604,703	40,793	3,658	539,265	2,188,419	3,128,624	587,119	3,715,743
1982	1,273,214	63,657	2,292	527,195	1,866,358	3,156,715	565,876	3,722,591
1983	1,215,225	85,580	2,355	540,584	1,843,744	3,170,999	568,926	3,739,925
1984	1,253,949	84,496	N.A.	651,491	1,989,935	3,249,696	596,477	3,846,173
1985	1,168,297	115,979	N.A.	565,231	1,849,508	3,274,553	587,358	3,861,911
Jan.	84,217	4,815	N.A.	47,834	136,866	270,926	50,454	321,380
Feb.	59,015	6,446	N.A.	43,924	109,568	252,695	45,446	298,141
Mar.	86,364	9,109	N.A.	49,388	144,861	281,943	49,602	331,545
Apr.	102,045	12,106	N.A.	45,333	159,483	271,299	47,457	318,756
May	115,637	15,788	N.A.	47,640	179,065	283,093	49,408	332,501
Jun.	95,645	11,027	N.A.	41,206	147,878	270,653	47,909	318,562
Jul.	99,286	11,220	N.A.	42,931	153,437	277,410	48,606	326,016
Aug.	96,547	13,142	N.A.	36,559	146,248	272,881	49,423	322,304
Sep.	94,646	8,771	N.A.	45,696	149,113	268,610	47,252	315,862
Oct.	100,377	8,240	N.A.	50,136	158,754	278,068	49,914	327,982
Nov.	119,957	8,552	N.A.	54,974	183,483	267,059	49,808	316,867
Dec.	114,561	6,762	N.A.	59,428	180,750	279,916	52,079	331,995
1986	1,524,978	91,269	N.A.	655,335	2,271,582	3,168,252	566,000	3,734,252
Jan.	107,627	8,464	N.A.	56,663	172,754	283,248	53,031	336,279
Feb.	83,100	4,675	N.A.	43,166	130,941	256,855	47,495	304,350
Mar.	92,641	7,468	N.A.	45,965	146,074	279,413	49,734	329,147
Apr.	110,520	9,034	N.A.	43,629	163,183	265,917	45,686	311,603
May	131,757	9,928	N.A.	56,712	198,397	273,964	47,827	321,791
Jun.	139,053	7,720	N.A.	58,663	205,436	258,700	45,115	303,815
Jul.	146,509	6,956	N.A.	61,726	215,191	268,448	46,728	315,176
Aug.	150,637	6,233	N.A.	65,340	222,210	259,580	44,784	304,364
Sep.	150,923	7,879	N.A.	53,888	212,690	249,843	44,050	293,893
Oct.	136,983	7,138	N.A.	55,120	199,241	260,984	45,778	306,762
Nov.	138,444	8,284	N.A.	51,025	197,753	252,374	47,083	299,457
Dec.	136,784	7,490	N.A.	63,438	207,712	258,926	48,689	307,615

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(3) Includes crude oil imported into the Strategic Petroleum Reserve.
(4) Excludes unfinished oils and plant condensate.

SOURCE: 1975-1980--U.S. Energy Informaton Administration, Annual Petroleum Statements.
1981-1986--U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

	IMPORTS					PRODUCTION		
Year	Crude Oil(3)	Unfinished Oils	Plant Condensate	Refined Products(4)	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1987	1,705,922	109,298	N.A.	622,139	2,437,378	3,047,378	582,291	3,629,669
Jan.	135,943	5,883	N.A.	55,122	196,948	262,888	49,055	311,943
Feb.	108,260	8,697	N.A.	50,608	167,565	234,880	45,306	280,186
Mar.	117,160	10,797	N.A.	51,655	179,612	262,398	49,529	311,927
Apr.	123,964	9,348	N.A.	44,023	177,335	254,945	47,688	302,633
May	134,549	8,745	N.A.	44,957	188,251	258,426	49,150	307,576
Jun.	144,197	12,906	N.A.	45,958	203,061	248,356	47,352	295,708
Jul.	164,131	7,786	N.A.	63,302	235,219	255,782	49,037	304,819
Aug.	170,802	8,448	N.A.	51,816	231,066	254,508	48,701	303,209
Sep.	153,312	8,179	N.A.	53,848	215,339	246,163	47,450	293,613
Oct.	159,390	9,800	N.A.	49,903	219,093	259,272	49,670	308,942
Nov.	150,389	8,310	N.A.	53,332	212,031	251,915	49,103	301,018
Dec.	148,825	10,399	N.A.	57,614	211,838	257,844	50,250	308,094
1988	1,846,585	128,116	N.A.	650,228	2,624,929	2,975,044	593,290	3,568,334
Jan.	143,190	11,754	N.A.	58,951	213,895	255,582	48,648	304,230
Feb.	136,080	8,408	N.A.	58,366	202,854	242,892	46,219	289,111
Mar.	148,434	9,078	N.A.	51,012	208,524	258,771	50,459	309,230
Apr.	153,782	12,228	N.A.	45,480	211,490	248,028	48,273	296,301
May	162,269	12,202	N.A.	49,274	223,745	254,291	50,359	304,650
Jun.	151,662	11,804	N.A.	43,086	206,552	244,731	48,157	292,888
Jul.	155,201	12,390	N.A.	49,237	216,828	249,820	49,893	299,713
Aug.	156,914	9,813	N.A.	56,380	222,387	249,966	50,329	300,295
Sep.	155,485	9,596	N.A.	51,521	216,602	236,994	48,664	285,658
Oct.	171,811	10,252	N.A.	55,593	237,656	247,206	51,606	298,812
Nov.	150,497	12,640	N.A.	63,180	226,317	239,553	49,998	289,551
Dec.	161,980	7,951	N.A.	68,147	238,078	247,210	50,685	297,895

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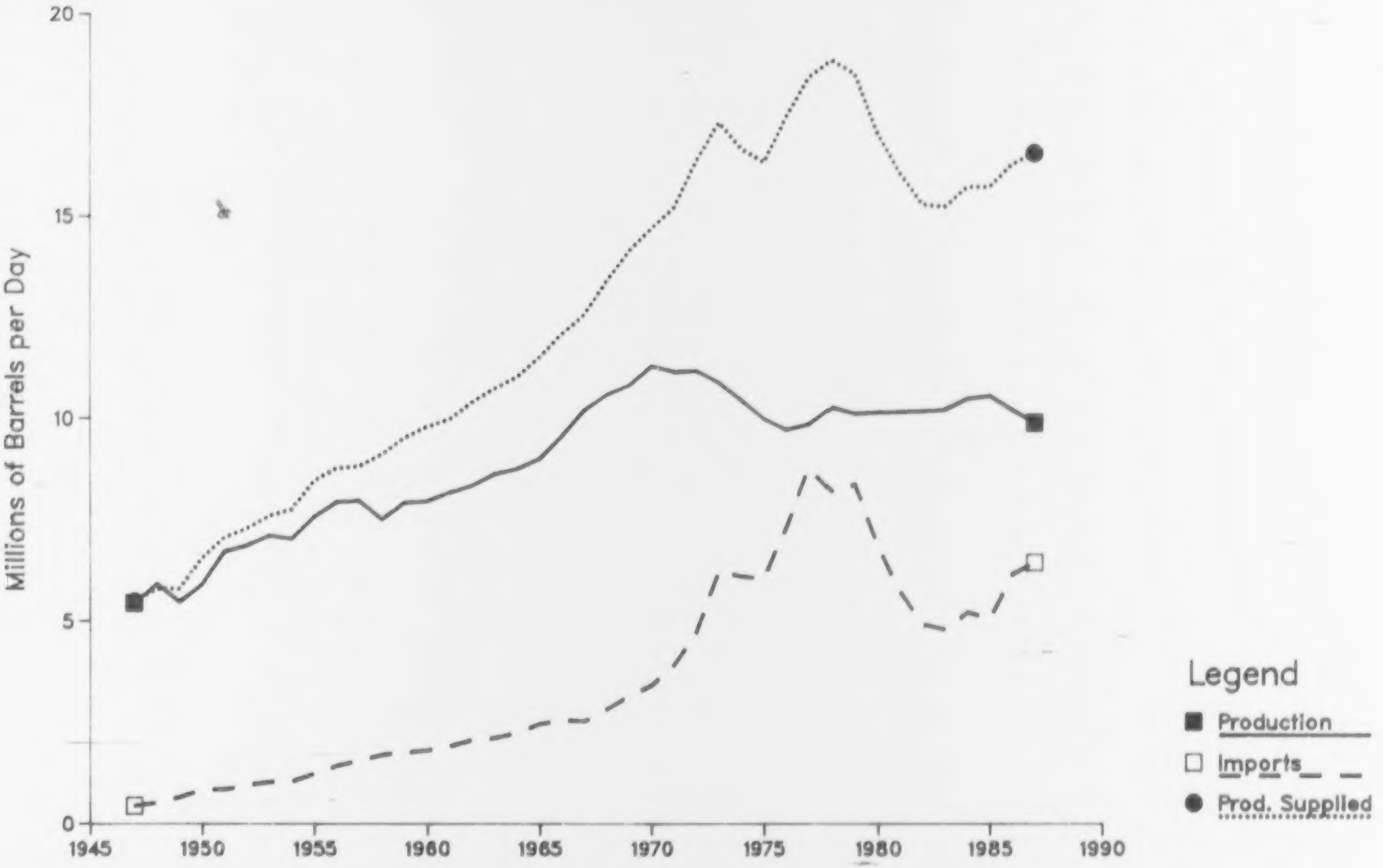
(3) Includes crude oil imported into the Strategic Petroleum Reserve.
(4) Excludes unfinished oils and plant condensate.

SOURCE: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual and Monthlies.

Section IX
Table 2c

U.S. PRODUCTION, IMPORTS AND PRODUCT SUPPLIED



Source: Department of Energy

Section IX
Table 3

U.S. CRUDE OIL IMPORTS BY AREA
(Thousands of Barrels)

Year	Western Hemisphere	Africa	Middle East	All Others	Total
1947	97,146	--	386	--	97,532
1948	105,912	--	23,181	--	129,093
1949	116,736	--	36,950	--	153,686
1950	136,096	--	41,618	--	177,714
1951	138,074	--	37,501	3,498	179,073
1952	147,771	--	56,556	5,264	209,591
1953	141,552	--	80,930	13,969	236,451
1954	148,010	--	77,764	13,705	239,479
1955	173,166	--	100,344	11,941	285,451
1956	225,007	--	103,517	13,309	341,833
1957	261,736	--	87,798	23,719	373,253
1958	199,256	--	123,091	25,732	348,079
1959	212,707	--	115,875	23,762	352,344
1960	230,229	1,451	113,175	26,720	371,575
1961	237,995	1,887	118,997	22,669	381,548
1962	267,680	9,808	109,071	24,480	411,039
1963	278,933	9,173	103,214	21,340	412,660
1964	289,012	17,743	108,841	23,047	438,643
1965	283,377	24,585	121,908	22,170	452,040
1966	289,800	31,543	107,579	18,198	447,120
1967	301,002	20,151	67,977	22,519	411,649
1968	315,977	57,461	72,330	26,555	472,323
1969	337,847	82,380	61,616	32,271	514,114
1970	351,366	44,365	61,892	25,670	483,293
1971	378,102	68,361	124,155	42,779	613,397
1972	421,799	172,105	155,982	61,249	811,135
1973	532,238	285,481	292,988	73,289	1,183,996
1974	446,534	356,121	362,186	104,314	1,269,155

Source: U.S. Bureau of Mines, Crude Petroleum, Petroleum products and Natural Gas Liquids, Annual and December_issues.

U.S. CRUDE OIL IMPORTS BY AREA
(Thousands of Barrels)

Year	Western Hemisphere	Africa	Middle East	All Others	Total
1975	453,772	488,515	409,496	146,398	1,498,181
1976	316,202	716,661	681,189	220,965	1,935,012
1977	328,468	912,631	910,744	262,484	2,414,327
1978	345,624	830,773	832,305	311,124	2,319,826
1979	436,525	910,644	765,249	267,123	2,379,541
1980	379,813	731,342	561,248	253,759	1,926,162
1981	352,373	486,768	447,518	318,044	1,604,703
1982	430,885	282,706	248,560	311,163	1,273,214
1983	497,237	247,555	160,221	310,213	1,215,225
1984	508,983	225,929	168,336	350,701	1,253,949
1985	605,771	213,090	89,583	259,853	1,169,297
1986	670,239	266,946	300,207	287,586	1,524,978
1987	699,301	363,829	359,628	283,164	1,705,922

Source: 1975-1980 -- U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 4

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Argentina	--	--	--	--	--	--	--	--	--	--
Bolivia	--	--	--	--	--	--	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	--
Canada	--	--	--	--	463	1,116	2,527	2,565	16,810	42,739
Chile	--	--	--	--	--	--	--	--	--	--
Colombia	10,944	8,542	11,678	16,159	16,312	16,209	15,860	12,415	8,125	9,009
Curacao and Aruba	5,125	4,707	613	611	--	--	--	371	487	--
Ecuador	--	--	--	--	--	--	90	300	474	368
Mexico	5,578	3,601	4,797	12,307	13,862	8,483	2,897	3,018	5,510	4,666
Peru	--	--	--	--	--	--	--	608	855	609
Trinidad	--	--	--	--	--	--	--	356	121	566
Venezuela	75,499	89,062	99,648	107,019	107,437	121,963	120,178	128,377	140,754	167,050
Total Western Hemisphere	97,146	105,912	116,736	136,096	138,074	147,771	141,552	148,010	173,136	225,007
Algeria	--	--	--	--	--	--	--	--	--	--
Angola	--	--	--	--	--	--	--	--	--	--
Egypt	--	--	--	--	--	--	--	--	--	--
Gabon	--	--	--	--	--	--	--	--	--	--
Libya	--	--	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--	--	--
Tunisia	--	--	--	--	--	--	--	--	--	--
Total Africa	--	--	--	--	--	--	--	--	--	--
Abu Dhabi	--	--	--	--	--	--	--	--	--	--
Iran	--	4,507	1,107	111	--	--	--	204	3,202	7,257
Iraq	--	766	341	--	--	705	2,287	2,188	6,988	9,650
Kuwait	111	3,442	23,445	26,741	21,601	26,444	38,611	41,046	48,954	50,953
Neutral Zone	--	--	--	--	--	--	--	2,983	6,639	3,072
Qatar	--	--	--	116	--	--	3,368	3,524	5,511	4,915
Saudi Arabia	275	14,466	12,057	14,650	15,900	29,407	36,668	27,819	29,050	27,670
Total Middle East	386	23,181	36,950	41,618	37,501	56,556	80,934	77,764	100,344	103,517
Borneo	--	--	--	--	3,498	1,624	--	--	--	--
Australia	--	--	--	--	--	--	--	--	--	--
Indonesia (Sumatra)	--	--	--	--	--	3,640	13,969	13,705	11,941	13,309
Malaysia										
Total Far East	--	--	--	--	3,498	5,264	13,969	13,705	11,941	13,309
U.S.S.R.	--	--	--	--	--	--	--	--	--	--
Total Eastern Hemisphere	386	23,181	36,950	41,618	40,999	61,820	94,903	91,469	112,285	116,826
ANNUAL TOTAL	97,532	129,093	153,686	177,714	179,073	209,591	236,455	239,479	285,421	341,833

Source: U.S. Bureau of Mines, Annual Petroleum Statements

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Argentina	--	--	--	--	--	--	--	--	--	--
Bolivia	--	--	--	--	--	--	--	--	--	1,237
Brazil	--	402	1012	309	1,776	1,277	2,052	--	--	--
Canada	53,804	30,621	33,902	40,866	65,819	85,152	90,394	101,607	107,762	126,712
Chile	--	--	--	--	--	--	--	--	--	--
Colombia	8,491	9,770	11,525	15,489	10,069	8,614	8,293	9,606	15,211	14,424
Curacao and Aruba	--	--	--	--	--	--	--	--	--	--
Ecuador	454	--	--	--	--	--	--	--	--	--
Mexico	3,187	999	229	766	6,835	3,644	3,657	3,577	2,552	--
Peru	--	--	--	--	--	--	--	--	--	--
Trinidad	1,175	329	92	219	172	--	--	--	--	--
Venezuela	208,642	191,559	195,240	200,528	180,387	168,993	174,537	174,222	157,852	147,427
Total Western Hemisphere	276,252	235,204	242,812	260,198	267,231	267,680	278,933	289,012	283,377	289,800
Algeria	--	--	--	284	--	1,543	380	2,249	3,256	1,400
Angola	--	--	--	--	--	--	--	--	--	--
Egypt	--	--	--	1,175	1,887	1,543	1,772	1,077	881	852
Gabon	--	--	--	--	--	--	--	--	--	--
Libya	--	--	--	--	--	6,722	7,021	14,417	15,152	25,177
Nigeria	--	--	--	--	--	--	--	--	5,296	4,114
Tunisia	--	--	--	--	--	--	--	--	--	--
Total Africa	--	--	--	1,459	1,887	9,808	9,173	17,743	24,585	31,543
Abu Dhabi/ United Arab Emirates(5)	--	--	--	--	--	--	--	1,112	5,035	4,781
Iran	5,176	5,829	9,699	11,170	22,780	17,735	22,717	24,143	28,633	30,833
Iraq	5,649	8,411	8,541	7,927	9,297	856	321	--	5,695	9,447
Kuwait	59,446	81,037	72,201	60,402	51,366	40,749	29,680	23,263	20,208	9,543
Neutral Zone	--	684	189	239	295	15,837	15,855	17,565	9,756	7,028
Qatar	2,257	1,538	733	1,408	12,999	9,535	5,835	7,294	4,346	176
Saudi Arabia	12,595	27,159	26,187	29,989	24,211	24,359	28,806	35,464	48,235	45,771
Total Middle East	85,123	124,658	117,550	111,135	120,371	109,071	103,214	108,841	121,908	107,579
Australia	--	--	--	--	--	--	--	--	--	--
Indonesia (Sumatra)	24,226	23,845	24,235	28,054	22,780	24,480	21,340	23,047	22,170	18,198
Malaysia	--	--	--	--	--	--	--	--	--	--
Total Far East	24,226	23,845	24,235	28,054	22,780	24,480	21,340	23,047	22,170	18,198
U.S.S.R.	--	--	--	--	--	--	--	--	--	--
Total Eastern Hemisphere	109,550	148,503	141,785	140,648	144,737	143,359	133,727	149,631	168,663	157,320
ANNUAL TOTAL	385,802	383,707	384,597	400,846	411,968	411,039	412,660	438,643	452,040	447,120

(5) Figures from 1947-1971 reflect Abu Dhabi only. Beginning 1972 Abu Dhabi, Dubai and Sharjah formed the United Arab Emirates.

Source: U.S. Bureau of Mines, December and Annual Petroleum Statements

Section IX
Table 4b

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Bolivia	7,016	6,866	5,596	534	798	--	891	2,467	1,940	1,849
Canada	150,409	169,418	203,298	245,258	263,294	312,440	365,370	288,763	219,175	135,690
Colombia	11,855	11,981	15,551	7,313	3,175	1,695	778	--	--	2,041
Ecuador	--	--	--	--	--	5,331	17,229	15,225	20,679	18,671
Mexico	--	--	--	--	--	--	489	597	25,660	31,670
Trinidad	--	--	--	265	--	8,626	21,739	23,045	42,097	38,142
Venezuela	131,089	125,737	111,722	97,996	110,574	93,300	125,742	116,437	144,221	88,139
Total Western Hemisphere	301,002	315,977	337,847	351,366	378,102	421,799	532,238	446,534	453,772	316,202
United Kingdom	--	--	--	--	--	--	--	--	125	4,923
Netherlands	--	--	--	--	--	--	--	--	1,500	--
Norway	--	--	--	--	--	--	--	322	4,552	12,881
Total Europe	--	--	--	--	--	--	--	322	6,177	17,804
Algeria	1,447	1,944	358	2,093	4,685	31,573	43,619	65,764	96,459	149,190
Angola	--	--	424	--	1,301	5,785	17,753	17,536	26,051	2,426
Congo (Brazzaville)	--	--	--	--	--	--	--	670	--	3,142
Egypt(UAR)	1,318	10,795	14,778	7,626	6,924	3,091	5,296	3,227	1,687	6,311
Gabon	661	--	--	--	--	--	--	8,552	9,811	9,685
Libya	15,293	41,591	48,862	17,156	19,426	40,069	48,585	1,495	81,403	162,457
Nigeria	1,432	3,131	17,958	17,490	34,826	88,887	163,687	254,358	272,265	370,962
Tunisia	--	--	--	--	1,199	2,520	6,541	4,519	839	5,400
Zaire	--	--	--	--	--	--	--	--	--	7,088
Total Africa	20,151	57,461	82,380	44,365	68,361	172,105	285,481	356,121	488,515	716,661
United Arab Emirates	1,936	5,605	5,051	23,047	29,026	26,873	25,764	25,158	42,585	93,105
Iran	23,781	21,154	15,306	12,184	38,576	49,700	78,990	168,956	101,575	109,073
Iraq	1,716	--	--	--	3,932	1,315	1,529	--	707	9,542
Israel	--	--	--	--	--	--	309	--	--	2,368
Kuwait	6,859	15,863	12,539	12,123	10,650	13,205	15,208	1,820	1,444	451
Oman	--	--	--	--	--	--	--	236	492	10,943
Qatar	--	--	191	--	--	1,263	2,663	6,189	6,657	8,631
Saudi Arabia	29,679	18,959	12,665	6,140	41,971	63,626	168,525	159,827	256,036	447,071
Total Middle East	67,977	72,330	61,616	61,892	124,155	155,982	292,988	362,186	409,496	681,184
Australia	--	--	--	--	2,567	327	--	--	--	--
Indonesia	22,519	26,555	32,271	25,670	40,232	59,633	73,055	103,482	138,270	196,599
Malaysia	--	--	--	--	--	966	234	510	1,951	5,914
Total Far East	22,519	26,555	32,271	25,670	42,799	60,926	73,289	103,992	140,221	202,513
U.S.S.R.	--	--	--	--	--	323	--	--	--	648
Total Eastern Hemisphere	110,647	156,346	176,267	131,927	235,315	389,336	651,758	822,621	1,044,409	1,618,810
ANNUAL TOTAL	411,649	472,323	514,114	483,293	613,417	811,135	1,183,996	1,269,155	1,498,181	1,935,012

Source: Energy Information Administration, Annual Petroleum Statements.
1981-1982 - Energy Information Administration, Petroleum Supply Annual.

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Bolivia	1,271	308	328	301	--	--	1,361	260	--	268
Canada	101,778	90,490	99,081	73,002	59,904	78,041	100,142	124,687	170,800	208,163
Colombia	--	--	--	--	--	--	--	--	--	20,715
Ecuador	20,229	13,910	11,010	6,129	13,967	11,788	20,594	17,066	20,334	23,408
Mexico	64,711	115,426	159,616	185,541	171,363	235,298	279,703	241,054	261,019	226,533
Trinidad & Tobago	48,841	51,974	44,950	42,011	37,186	33,541	30,207	31,939	35,595	34,060
Venezuela	91,331	66,125	106,794	56,950	53,590	56,434	59,854	92,728	111,627	151,937
Total Western Hemisphere	328,468	345,624	436,525	379,813	352,373	430,885	497,237	508,983	605,771	670,239
United Kingdom	35,583	61,555	71,923	63,459	134,766	161,061	133,142	138,246	101,552	115,659
Netherlands	1,509	846	2,685	22	1	3	1,039	1,046	--	--
Norway	17,628	37,815	27,523	52,727	41,452	37,299	23,836	40,927	11,311	19,403
Total Europe	54,720	100,216	102,131	116,208	176,315	198,365	193,529	180,219	113,096	135,062
Algeria	198,468	231,253	222,042	166,980	95,165	32,714	64,274	71,074	30,524	28,423
Angola	6,150	2,290	14,088	13,389	16,528	15,248	25,763	31,172	37,889	37,076
Congo	2,440	5,454	909	2,658	1,276	456	6,616	12,226	5,962	7,188
Egypt	13,034	7,395	20,205	11,249	12,155	14,683	8,958	3,485	956	3,620
Gabon	12,632	13,841	15,328	9,062	12,633	14,429	21,415	20,838	18,797	8,959
Libya	256,984	232,897	234,173	200,406	115,572	8,452	--	--	--	--
Nigeria	412,498	332,035	390,116	307,840	222,981	186,329	109,807	75,669	102,134	159,683
Tunisia	10,425	4,460	6,429	2,801	4,104	3,481	2,564	4	4,259	1,230
Zaire	--	263	1,379	4,690	5,977	6,914	8,158	11,460	12,569	9,490
Total Africa	912,631	830,773	910,644	731,342	486,768	282,706	247,555	225,929	213,090	266,946
United Arab Emirates	121,640	140,653	102,709	63,052	27,950	29,509	6,641	32,966	12,760	13,806
Iran	193,415	202,357	108,269	3,086	--	12,854	17,575	3,706	9,919	7,078
Iraq	26,894	22,673	32,052	10,328	--	974	3,758	4,554	16,889	29,401
Israel	--	--	--	--	--	--	--	--	--	--
Kuwait	15,434	1,718	1,898	9,712	--	904	2,641	8,780	1,316	10,106
Oman	27,140	22,240	13,466	8,693	8,702	8,183	12,281	3,755	655	2,897
Qatar	24,281	23,224	11,450	7,920	2,665	2,600	--	1,497	--	4,365
Saudi Arabia	501,072	416,910	491,514	457,671	406,059	193,536	117,325	113,078	48,044	225,627
Total Middle East	910,744	832,305	765,249	561,248	447,518	248,560	160,221	168,336	89,583	300,207
Australia	--	--	--	--	--	--	--	9,177	7,557	10,973
Indonesia	184,984	194,620	138,528	114,990	116,126	82,315	115,156	111,404	106,654	108,376
Malaysia	20,257	13,677	18,954	22,213	12,143	6,574	930	--	301	3,883
Total Far East	207,089	210,632	159,933	137,551	128,269	90,023	116,683	126,196	146,755	152,522
U.S.S.R.	675	276	--	--	--	--	--	--	--	2
Total Eastern Hemisphere	2,085,859	1,974,202	1,943,016	1,546,349	1,252,330	842,429	717,988	744,966	562,524	854,739
ANNUAL TOTAL	2,414,327	2,319,826	2,379,541	1,926,162	1,604,703	1,273,214	1,215,225	1,253,949	1,168,297	1,524,978

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1987
Bolivia	--
Canada	221,980
Colombia	41,809
Ecuador	8,217
Mexico	219,552
Trinidad & Tobago	27,408
Venezuela	178,163
Total Western Hemisphere	699,301
United Kingdom	111,060
Netherlands	--
Norway	25,395
Total Europe	136,665
Algeria	41,932
Angola	65,657
Congo	5,960
Egypt	19,884
Gabon	12,655
Libya	--
Nigeria	193,004
Tunisia	--
Zaire	8,128
Total Africa	363,829
United Arab Emirates	20,602
Iran	35,952
Iraq	29,842
Israel	--
Kuwait	25,630
Oman	12,831
Qatar	--
Saudi Arabia	234,213
Total Middle East	359,628
Australia	17,592
Indonesia	95,775
Malaysia	4,464
Total Far East	148,299
U.S.S.R.	--
Total Eastern Hemisphere	1,006,621
ANNUAL TOTAL	1,705,922

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1987.

Section IX
Table 5

U.S. IMPORTS OF CRUDE OIL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year	P.A.D.D. I	P.A.D.D. II	P.A.D.D. III	P.A.D.D. IV	P.A.D.D. V	Imported Crude Oil
1952(1)	192,349	1,116	4,423	--	11,703	209,591
1953	202,611	2,562	2,871	--	28,411	236,455
1954	213,413	2,772	4,553	--	18,741	239,479
1955	232,850	7,425	11,098	--	34,048	285,421
1956	244,453	19,904	11,917	70	65,489	341,833
1957	247,395	22,296	8,726	86	94,749	373,255
1958	238,769	25,328	16,242	13	67,655	348,007
1959	235,259	21,279	10,184	15	85,607	352,344
1960	244,196	23,265	2,939	20	101,155	371,575
1961	236,905	30,971	2,354	30	111,288	381,548
1962	244,235	34,646	2,489	682	128,987	411,039
1963	248,199	34,666	1,698	3,528	124,569	412,660
1964	252,527	37,801	1,835	4,409	142,071	438,643
1965	258,361	41,264	--	4,807	147,608	452,040
1966	259,499	48,114	449	4,954	134,104	447,120
1967	216,920	56,408	672	6,648	131,001	411,649
1968	263,866	78,365	741	10,058	119,393	472,323
1969	269,007	88,434	--	12,714	143,959	514,114
1970	211,403	115,613	--	17,573	138,704	483,293
1971	252,088	137,064	20,449	16,869	186,947	613,417
1972	354,549	171,338	28,331	14,126	242,791	811,135
1973	466,074	260,368	145,654	16,132	295,768	1,183,996
1974	428,608	250,771	289,999	16,579	283,198	1,269,155
1975	451,549	282,658	437,049	16,090	310,835	1,498,181
1976	517,840	366,107	651,381	19,878	379,806	1,935,012
1977(2)	553,955	516,775	927,596	15,957	400,044	2,414,327
1978(2)	542,856	494,132	1,045,691	18,132	219,015	2,319,826
1979(2)	522,580	556,861	1,083,749	23,656	192,695	2,379,541
1980(2)	491,292	409,533	854,233	14,268	156,836	1,926,162
1981(2)	407,384	248,393	828,287	10,513	110.126	1,604,703
1982(2)	349,583	211,727	628,591	14,625	68,687	1,273,214
1983(2)	298,070	193,427	632,974	13,959	76,794	1,215,225
1984(2)	345,642	182,565	639,238	12,233	74,271	1,253,949

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(1) Figures not available by P.A.D.D. prior to 1952.
(2) Figures include crude oil imported into the Strategic Petroleum Reserve

Source: U.S. Bureau of Mines, 1952-1972 Minerals Yearbook
U.S. Energy Information Administration 1973-1980 Annual Petroleum Statements
U.S. Energy Information Administration 1981-1984 -- Petroleum Supply Annuals

Section IX
Table 5a

U.S. IMPORTS OF CRUDE OIL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year	P.A.D.D. I	P.A.D.D. II	P.A.D.D. III	P.A.D.D. IV	P.A.D.D. V	Total Imported Crude Oil
1985(2)	356,697	215,179	517,861	14,056	64,505	1,168,297
1986(2)	394,490	286,276	756,465	19,613	68,134	1,524,978
1987(2)	405,596	317,384	887,454	23,563	71,925	1,705,922

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(2) Figures include crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.

Section IX
Table 6

U.S. IMPORTS OF RESIDUAL AND DISTILLATE FUEL BY P.A.D. DISTRICTS
(Thousands of Barrels)

	P.A.D.D. I		P.A.D.D. II		P.A.D.D. III		P.A.D.D. IV		P.A.D.D. V		Totals	
Year	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil
1950	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	120,036	2,602
1951	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	119,166	1,767
1952	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	128,479	2,742
1953	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	131,533	3,379
1954	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	129,124	3,195
1955	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	152,035	4,413
1956	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	162,869	5,159
1957	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	173,229	8,566
1958	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	182,306	14,892
1959(2)	219,341	17,283	230	13	2,981	360	1	2	18	0	222,571	17,658
1960	211,788	11,365	59	12	14,416	1,298	0	96	6,945	0	233,208	12,771
1961	214;453	15,533	284	24	12,320	1,654	1	142	16,210	24	243,268	17,377
1962	237,565	9,811	610	31	11,775	1,892	47	92	14,317	5	264,314	11,831
1963	252,785	7,787	800	63	12,327	1,250	26	1	6,815	9	272,753	9,110
1964	274,306	10,559	804	64	11,204	1,119	45	0	9,412	43	295,771	11,785
1965	318,634	11,041	1,188	17	14,598	1,811	43	0	10,724	133	345,187	13,002
1966	357,907	12,548	860	107	11,708	967	55	0	6,265	223	376,795	13,845
1967	383,260	16,851	587	224	7,475	891	60	0	4,557	526	395,939	18,492
1968	394,528	45,502	573	360	8,271	1,290	54	0	6,502	996	409,928	48,148
1969	440,983	47,720	627	1,264	12,167	937	78	0	7,756	962	461,611	50,883
1970	536,968	49,333	4,207	2,223	11,029	1,192	52	0	5,589	1,078	557,845	53,826
1971	558,771	53,373	3,953	258	6,553	1,079	41	0	8,382	1,073	577,700	55,783
1972	616,990	64,302	5,458	473	6,212	1,191	0	0	8,741	483	637,401	66,449
1973	639,611	125,210	6,068	1,353	10,471	12,406	0	104	20,075	4,076	676,225	143,149
1974	538,573	95,018	7,919	621	11,806	6,766	--	32	20,859	3,142	579,157	105,579

(1) Figures not available by P.A.D. prior to 1959.
(2) Beginning in 1959, figures include receipts from Puerto Rico and Virgin Islands.

Source: U.S. Bureau of Mines. 1950-1972, Minerals Yearbook
1973-1974, Crude Petroleum, Petroleum Products, and Natural Gas Liquids; Annual and December issues

Section IX
Table 6a

U.S. IMPORTS OF RESIDUAL AND DISTILLATE FUEL BY P.A.D. DISTRICTS
(Thousands of Barrels)

	P.A.D.D. I		P.A.D.D. II		P.A.D.D. III		P.A.D.D. IV		P.A.D.D. V		Totals	
Year(2)	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil
1975	416,105	54,300	14,015	223	3,957	1,441	--	1	12,451	713	446,528	56,678
1976	495,980	49,225	11,720	97	1,728	680	--	--	7,897	3,518	517,325	53,520
1977	467,124	88,171	11,754	55	818	413	--	--	16,369	2,673	496,065	91,318
1978	468,937	59,023	17,101	306	939	210	--	--	7,663	3,749	494,640	63,288
1979	392,861	64,091	14,267	70	2,044	1,568	--	4	10,972	4,756	420,144	70,489
1980	317,157	48,518	10,754	--	6,485	1,268	--	--	9,161	2,122	343,557	51,908
1981	260,156	59,180	8,592	5	14,055	2,634	--	2	9,266	1,251	292,070	63,070
1982	235,912	29,763	3,966	392	35,700	1,526	9	4	7,514	2,355	283,101	34,040
1983	222,276	56,129	5,375	3,075	19,555	2,189	193	488	7,814	1,660	255,213	63,542
1984	218,730	91,885	2,069	2,999	23,488	1,029	158	1,300	4,766	2,227	249,211	99,439
1985	163,779	64,576	907	2,652	16,579	855	131	1,363	4,888	3,643	186,284	73,089
1986	221,943	82,414	1,394	2,857	13,372	864	50	966	7,394	3,195	244,153	90,296
1987	192,337	84,822	1,316	3,394	9,702	2,855	10	804	2,773	1,301	206,138	93,176

(2) Figures include receipts from Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

U.S. IMPORTS OF UNFINISHED OILS AND REFINED PRODUCTS BY P.A.D. DISTRICTS(2)
(Thousands of Barrels)

	P.A.D.D. I		P.A.D.D. II		P.A.D.D. III		P.A.D.D. IV		P.A.D.D. V		Totals	
Year	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products
1959(1)	16,628	264,347	587	606	2,148	4,861	--	31	3,709	4,322	23,072	274,167
1960	9,534	248,388	520	1,019	994	16,788	--	121	5,430	9,742	15,478	276,058
1961	18,045	256,484	1,184	1,324	145	15,258	--	180	5,974	19,524	25,348	292,770
1962	22,297	279,475	360	1,746	1,616	15,101	--	154	8,243	19,672	32,516	316,238
1963	21,779	299,530	476	2,193	2,102	14,952	--	39	7,345	13,637	31,702	330,351
1964	21,151	321,994	478	3,552	1,011	13,117	--	159	9,947	16,684	32,587	355,506
1965	23,260	369,760	213	5,739	377	18,073	--	727	9,856	20,727	33,706	415,026
1966	26,743	410,435	43	7,276	15	13,826	--	971	8,435	24,298	35,236	456,806
1967	23,222	434,265	20	7,171	276	9,873	--	879	11,707	26,929	35,225	479,117
1968	21,987	489,628	1	7,573	109	10,618	--	2,253	7,253	27,624	29,350	537,696
1969	28,975	543,947	51	8,245	1,034	15,087	--	2,979	8,706	32,413	38,766	602,671
1970	30,221	651,123(3)	--	20,022(3)	913	21,191	--	3,192(3)	8,127	29,980(3)	39,261	725,508(3)
1971	30,651	685,309(3)	--	22,918(3)	2,217	17,425	--	7,786(3)	12,325	43,832(3)	45,193	777,270(3)
1972	30,715	761,491(3)	--	39,798(3)	1,548	16,474	--	16,623(3)	13,442	44,088(3)	45,705	878,474(3)
1973	26,216	874,707(3)	739	53,985(3)	10,681	45,714	--	16,285(3)	12,525	58,645(3)	50,161	1,049,336
1974	14,084	757,416(3)	1,155	49,860(3)	19,208	43,356(3)	--	14,143(3)	9,781	52,789(3)	44,228	917,564(3)
1975	6,038	578,739(3)	392	49,345(3)	4,170	15,989(3)	--	12,327(3)	2,385	42,769(3)	12,985	699,169(3)
1976	7,721	619,068	16	34,334	3,750	13,382	--	5,888(3)	248	32,584	11,735	705,256
1977	9,333	665,984	15	43,912	905	17,422	--	5,922	986	40,659	11,239	773,899
1978	9,022	614,132	15	45,676	226	8,427	--	4,635	650	43,998	9,913	716,868
1979	7,945	545,758	338	68,663	7,687	21,135	--	4,737	5,402	40,532	21,372	680,825
1980	11,489	446,336	217	68,505	5,855	25,986	--	5,222	2,454	32,696	20,015	578,745
1981	18,096	392,310	396	69,554	19,442	39,355	--	7,877	2,858	33,827	40,792	542,923
1982	23,182	355,073	2,708	65,611	35,027	63,820	--	7,141	2,741	37,842	63,657	529,487
1983	32,030	390,381	4,120	62,081	47,060	50,025	604	6,981	1,765	33,471	85,580	542,938
1984	19,936	472,223	3,821	61,098	55,977	73,631	--	8,856	4,762	35,683	84,496	651,490
1985	23,527	399,657	2,985	54,284	88,611	60,507	--	9,190	856	41,593	115,979	565,231
1986	31,039	470,274	0	39,589	58,100	92,858	--	7,666	2,130	44,948	91,269	655,335
1987	41,514	473,083	207	38,783	65,943	75,854	--	6,801	1,634	29,618	109,298	622,139

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(1) Figures not available by P.A.D. district prior to 1959.
(2) Figures include receipts from Puerto Rico and Virgin Islands.
(3) Includes plant condensate.

Source: U.S. Department of Interior, 1959-1972, Minerals Yearbook
Department of Energy, 1973-1980, Annual Petroleum Statements.
1981-1987, Petroleum Supply Annual.

Section IX
Table 8

TOTAL U.S. PETROLEUM IMPORTS BY SOURE
(Thousands of Barrels Per Day)

	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
WESTERN HEMISPHERE													
Bahamas	--	--	--	--	--	--	--	--	--	--	--	1	--
Canada	158	87	98	122	204	250	265	303	322	384	450	507	608
Colombia	23	26	36	40	28	25	25	30	51	50	48	52	69
Ecuador	--	--	--	--	--	--	--	--	--	--	--	--	--
Mexico	38	32	35	17	39	49	48	46	48	45	49	45	41
Neth. Antilles	273	338	324	300	264	297	312	333	361	332	361	392	450
Puerto Rico	5	27	38	36	43	41	44	47	47	60	59	66	72
Trinidad	9	35	33	50	105	82	112	115	132	153	166	189	215
Venezuela	754	711	784	832	800	907	899	931	995	1,021	935	888	876
Virgin Islands	--	--	--	--	--	--	--	--	--	--	36	78	116
Other	5	11	8	2	10	9	21	10	11	21	41	46	34
Total	1,265	1,267	1,356	1,399	1,493	1,660	1,726	1,815	1,967	2,066	2,145	2,264	2,481
EASTERN HEMISPHERE													
Abu Dhabi/United Arab Emirates(1)	--	--	--	--	--	--	--	3	14	13	5	16	14
Algeria	--	--	--	--	--	--	--	--	--	--	--	--	--
Indonesia	65	58	55	73	62	67	59	63	61	50	62	73	89
Italy	--	8	4	1	--	--	--	1	2	18	28	49	75
Iran	18	15	25	36	60	49	62	66	79	89	71	68	46
Iraq	--	--	--	--	--	--	--	--	--	--	--	--	--
Kuwait	141	197	189	146	130	120	89	69	60	31	23	48	39
Libya	--	--	--	--	--	19	19	39	41	69	42	114	135
Malaysia	--	--	--	--	--	--	--	--	--	--	--	--	--
Netherlands	--	--	--	--	--	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--	15	11	5	8	49
Norway	--	--	--	--	--	--	--	--	--	--	--	--	--
Oman	--	--	--	--	--	--	--	--	--	--	--	--	--
Qatar	--	--	--	--	--	--	--	--	--	--	--	--	--
Saudi Arabia	60	74	68	79	69	73	86	109	144	135	86	60	42
United Kingdom	--	--	--	--	--	--	--	--	--	--	--	--	--
Other	25	81	83	81	103	94	82	93	85	91	70	140	196
Total	309	433	424	416	424	422	397	443	501	507	392	576	685
TOTAL U.S. IMPORTS	1,574	1,700	1,780	1,815	1,917	2,082	2,123	2,258	2,468	2,573	2,537	2,840	3,166

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(1) Figures from 1957 to 1971 reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai, and Sharjah which formed the United Arab Emirates.

Source: U.S. Bureau of Mines

TOTAL U.S. PETROLEUM IMPORTS BY SOURCE
(Thousands of Barrels Per Day)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
WESTERN HEMISPHERE													
Bahamas	32	150	174	174	164	152	116	167	160	147	76	74	65
Canada	767	857	1,108	1,325	1,070	846	599	516	467	538	455	447	482
Colombia	45	27	16	9	5	9	21	17	20	18	4	--	--
Ecuador	--	--	--	48	42	57	51	55	54	42	27	48	42
Mexico	42	27	21	16	8	71	87	179	318	439	533	522	685
Neth. Antilles	442	429	424	585	511	332	275	214	229	231	225	197	175
Puerto Rico	87	95	102	99	90	90	88	105	94	92	88	62	50
Trinidad	217	182	226	255	251	242	273	286	253	190	176	133	112
Venezuela	983	1,019	960	1,135	979	702	699	687	646	690	481	406	412
Virgin Islands	189	273	303	329	391	406	422	466	428	431	388	327	316
Other	52	18	61	28	21	44	44	16	33	50	59	79	84
Total	2,856	3,077	3,395	4,033	3,532	2,951	2,675	2,708	2,701	2,868	2,512	2,216	2,423
EASTERN HEMISPHERE													
AbuDhabi/United Arab Emirates(1)	63	80	73	71	74	117	254	333	385	281	172	81	92
Algeria	8	15	92	135	190	282	432	552	649	636	488	311	170
Indonesia	70	111	164	213	300	389	539	533	573	420	348	366	248
Italy	83	79	83	125	74	27	37	51	38	30	4	--	--
Iran	38	112	142	223	469	280	298	530	555	304	9	--	35
Iraq	--	11	4	4	--	3	26	76	62	88	28	--	3
Kuwait	36	36	45	47	5	16	5	48	6	8	27	--	5
Libya	47	57	123	164	4	232	453	715	654	658	554	319	26
Malaysia	N.A.	N.A.	1	12	12	8	18	63	47	66	70	36	20
Netherlands	N.A.	N.A.	12	53	43	18	8	31	5	23	2	30	35
Nigeria	50	103	251	459	713	762	1,025	1,135	919	1,080	857	620	514
Norway	N.A.	N.A.	2	1	1	17	36	50	104	75	144	119	102
Oman	N.A.	N.A.	N.A.	N.A.	1	2	30	79	68	44	25	24	22
Qatar	--	--	3	7	17	18	24	67	64	31	22	7	7
Saudi Arabia	42	127	190	486	461	715	1,230	1,377	1,144	1,356	1,261	1,129	552
United Kingdom	N.A.	N.A.	10	9	8	11	31	124	180	202	176	375	456
Other	134	143	152	244	207	208	174	272	324	286	209	363	403
Total	563	848	1,347	2,253	2,579	3,105	4,620	6,036	5,662	5,588	4,396	3,780	2,690
TOTAL U.S IMPORTS	3,419	3,925	4,742	6,256	6,111	6,056	7,295	8,744	8,363	8,456	6,908	5,996	5,113

N.A. Not available on individual country basis, included in "Other."

(1) Figures from 1957 to 1971 reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai, and SHARJAH which formed the United Arab Emirates.

Source: U.S. Energy Information Administration, "Supply, Demand, and Stocks by P.A.D. Districts", Annual Reports.
U.S. Energy Information Administration, 1981-1982 -- Petroleum Supply Annual.

TOTAL U.S. PETROLEUM IMPORTS BY SOURCE
(Thousands of Barrels Per Day)

	1983	1984	1985	1986	1987
WESTERN HEMISPHERE					
Bahamas	125	88	40	37	37
Canada	547	630	770	807	848
Colombia	--	--	--	87	148
Ecuador	61	55	67	77	29
Mexico	826	748	816	699	655
Neth. Antilles	189	188	40	25	29
Puerto Rico	40	42	28	21	21
Trinidad	96	94	113	125	106
Venezuela	422	548	605	793	804
Virgin Islands	282	294	247	244	272
Other	114	110	143	152	127
Total	2,702	2,797	2,869	3,067	3,076
EASTERN HEMISPHERE					
Abu Dhabi/United Arab Emirates	30	117	45	44	61
Algeria	240	323	187	271	295
Indonesia	338	343	314	318	285
Italy	--	--	--	76	54
Iran	48	10	27	19	98
Iraq	10	12	46	81	83
Kuwait	14	36	21	68	84
Libya	--	1	4	--	--
Malaysia	4	1	3	12	13
Netherlands	65	65	58	54	60
Nigeria	302	216	293	440	535
Norway	66	114	32	60	80
Oman	34	14	5	9	36
Qatar	--	5	--	13	--
Saudi Arabia	337	325	168	685	751
United Kingdom	382	402	310	350	352
Other	479	656	685	657	815
Total	2,349	2,640	2,198	3,157	3,602
TOTAL U.S. IMPORTS	5,051	5,437	5,067	6,224	6,678

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 9

U.S. DIRECT PETROLEUM IMPORTS FROM MEMBERS OF THE ORGANIZATION OF ARAB PETROLEUM EXPORTING COUNTRIES
SEPTEMBER 1973 - APRIL 1974
(Thousands of Barrels)

	SEPTEMBER 1973			OCTOBER 1973			NOVEMBER 1973			DECEMBER 1973		
OAPEC MEMBERS	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total
1. Algeria	3,715	924	4,639	3,690	877	4,567	891	974	1,865	28	312	340
2. Bahrain	--	38	38	--	589	589	--	552	552	--	99	99
3. Egypt	--	--	--	--	--	--	--	--	--	--	--	--
4. Iraq	515	--	515	364	--	364	--	--	--	--	--	--
5. Kuwait	1,334	--	1,334	1,724	--	1,724	--	--	--	--	--	--
6. Libya	4,603	1,212	5,815	5,095	1,213	6,308	3,748	407	4,155	579	174	753
7. Qatar	1,222	--	1,222	543	--	543	273	--	273	74	--	74
8. Saudi Arabia	17,967	652	18,619	23,075	1,371	24,446	18,493	705	19,198	5,663	196	5,859
9. Syria	--	--	--	--	--	--	--	--	--	--	--	--
10. United Arab Emirates	2,652	--	2,652	1,920	3	1,923	3,197	--	3,197	--	1	1
OAPEC TOTAL	32,008	2,826	34,834	36,411	4,053	40,464	26,602	2,638	29,240	6,344	782	7,126
U.S. TOTAL	104,117	88,227	192,344	115,905	89,706	205,611	103,570	104,100	207,670	89,633	98,096	187,729
OAPEC AS A % OF U.S. TOTAL	30.7%	3.2%	18.1%	31.4%	4.5%	19.7%	25.7%	2.5%	14.1%	7.1%	0.8%	3.8%

	JANUARY 1974			FEBRUARY 1974			MARCH 1974			APRIL 1974		
OAPEC MEMBERS	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total	Crude	Products	Total
1. Algeria	--	--	--	75	--	75	244	--	244	3,448	141	3,589
2. Bahrain	--	--	--	--	3	3	--	--	--	--	--	--
3. Egypt	--	--	--	--	--	--	--	--	--	543	--	543
4. Iraq	--	--	--	--	--	--	--	--	--	--	--	--
5. Kuwait	--	--	--	--	--	--	--	--	--	62	--	62
6. Libya	29	--	29	468	--	468	142	--	142	244	--	244
7. Qatar	--	--	--	--	--	--	--	--	--	--	--	--
8. Saudi Arabia	593	66	659	1,073	30	1,103	2,364	289	2,653	1,234	736	1,970
9. Syria	--	--	--	--	--	--	--	--	--	--	--	--
10. United Arab Emirates	304	--	304	--	--	--	--	--	--	405	--	405
OAPEC TOTAL	926	66	992	1,616	33	1,649	2,750	289	3,039	5,936	877	6,813
U.S. TOTAL	73,839	92,158	165,997	62,940	83,246	146,186	76,329	85,328	161,657	98,011	81,094	179,105
OAPEC AS A % OF U.S. TOTAL	1.3%	0.1%	0.6%	2.6%	*	1.1%	3.6%	0.3%	1.9%	6.1%	1.1%	3.8%

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* Less than one-tenth of one percent
(1) Less than 1/2 unit

Source: U.S. Bureau of Mines and U.S. Bureau of Census

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1972

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	70	65	--	10	40	5	5	--	225
Canada	1,085	--	--	--	--	--	--	--	--	--	1,085
Caribbean	2,270	520	160	545	5	10	10	--	--	100	3,620
Other Western Hemisphere	45	--	25	--	--	--	30	--	--	--	1,000
Western Europe	160	15	--	--	40	--	--	--	20	90	325
Middle East	475	250	1,115	8,570	460	1,265	3,770	260	605	180	16,950
North Africa	230	30	250	2,730	10	--	5	--	220	--	3,475
West Africa	265	70	290	1,170	--	--	70	--	30	20	1,915
South East Asia	180	--	10	5	10	--	830	55	--	--	1,090
USSR, Eastern Europe	20	--	130	970	75	--	25	--	40	--	1,260
Other Eastern Hemisphere	10	--	--	5	--	30	5	--	--	--	50
TOTAL IMPORTS	4,740	915	2,050	14,060	600	1,315	4,785	320	920	390	30,095

1973

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	55	85	5	25	30	--	--	--	230
Canada	1,335	--	--	--	--	--	--	--	--	--	1,335
Caribbean	2,540	500	130	355	5	5	10	--	--	85	3,630
Other Western Hemisphere	80	--	100	--	--	--	--	--	--	20	200
Western Europe	265	--	--	--	60	--	--	--	10	70	405
Middle East	820	320	1,000	10,350	535	1,315	4,385	290	775	180	19,970
North Africa	360	40	175	2,545	5	--	20	--	265	10	3,420
West Africa	515	90	415	1,030	--	--	110	--	5	--	2,165
South East Asia	240	--	--	10	--	--	1,115	40	--	--	1,405
USSR, Eastern Europe	35	--	145	935	75	5	55	--	20	15	1,285
Other Eastern Hemisphere	15	--	--	--	--	25	35	--	5	5	85
TOTAL IMPORTS	6,205	980	2,020	15,310	685	1,375	5,760	330	1,080	385	34,130

*Includes quantities in transit, transit losses, minor movements not otherwise shown, military uses, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10a

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1974

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	60	75	5	5	35	10	--	--	220
Canada	1,025	--	--	20	--	--	--	--	--	--	1,045
Caribbean	2,320	430	155	320	10	--	10	--	--	--	3,245
Other Western Hemisphere	125	--	120	--	--	--	--	--	--	--	245
Western Europe	240	--	--	--	80	--	15	--	35	95	465
Middle East	1,025	400	1,265	10,195	490	1,320	4,050	285	715	305	20,050
North Africa	230	15	130	1,915	10	--	70	--	255	--	2,625
West Africa	795	15	305	1,300	--	30	100	--	--	--	2,545
South East Asia	315	--	45	5	--	--	990	45	--	--	1,400
USSR, E. Europe & China	30	--	160	1,010	60	--	120	--	20	--	1,400
Other Eastern Hemisphere	20	--	--	--	--	30	40	--	--	--	90
TOTAL IMPORTS	6,125	890	2,240	14,840	655	1,385	5,430	340	1,025	400	33,330

1975

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Total Exports
United States	--	20	65	70	5	--	30	10	10	210
Canada	800	--	--	--	--	--	--	--	--	800
Latin America	2,270	270	120	380	40	--	20	--	75	3,175
Western Europe	45	--	--	--	165	--	--	--	35	245
Middle East	1,140	540	1,525	8,815	475	1,450	3,675	255	630	18,505
North Africa	500	--	140	1,530	--	--	70	--	165	2,405
West Africa	850	20	200	835	--	--	70	--	--	1,975
East and South Africa	--	--	--	--	--	35	--	--	--	35
South Asia	--	--	--	5	--	--	--	--	--	5
South East Asia	400	--	80	--	10	--	885	80	--	1,455
Japan	--	--	--	5	--	--	--	--	--	5
Australasia	5	--	--	--	--	10	35	--	--	5
USSR, E. Europe & China	15	--	210	970	15	70	160	--	30	1,470
TOTAL IMPORTS	6,025	850	2,340	12,610	710	1,565	4,945	345	945	30,335

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*Includes quantities in transit, transit losses, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1976

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	10	70	80	10	5	30	5	10	--	220
Canada	595	--	--	5	--	--	--	--	--	--	600
Latin America	2,010	320	140	335	10	--	10	5	30	450	3,310
Western Europe	160	--	--	--	100	--	--	--	85	--	345
Middle East	1,910	385	1,725	9,405	490	1,630	3,955	255	710	390	20,855
North Africa	915	20	160	1,680	15	10	45	--	225	--	3,070
West Africa	1,085	30	230	860	--	--	25	--	--	--	2,230
East and South Africa	--	--	--	--	--	30	--	--	--	--	30
South East Asia	585	--	15	5	--	--	1,080	80	--	--	1,765
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	10	--	--	--	--	5	40	--	--	--	55
USSR, E. Europe & China	20	--	160	1,355	20	100	135	--	25	--	1,815
TOTAL IMPORTS	7,290	765	2,500	13,725	645	1,785	5,320	345	1,085	840	34,300

1977

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	25	105	75	5	--	30	5	5	--	250
Canada	540	--	--	--	--	--	--	--	--	--	540
Latin America	2,205	290	110	290	45	--	10	--	65	100	3,115
Western Europe	250	--	10	--	130	5	--	5	80	--	480
Middle East	2,560	395	1,570	8,855	485	1,600	4,095	240	805	125	20,730
North Africa	1,320	--	150	1,735	5	--	25	--	60	--	3,295
West Africa	1,220	--	275	845	--	--	--	--	30	--	2,370
East and South Africa	--	--	--	--	--	20	--	--	--	--	20
South Asia	--	--	--	--	--	--	--	--	--	--	--
South East Asia	590	--	--	20	5	--	1,155	90	5	50	1,915
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	10	--	--	--	--	5	45	--	--	--	60
USSR, E. Europe & China	15	--	180	1,475	5	120	150	--	30	--	1,975
TOTAL IMPORTS	8,710	710	2,400	13,295	680	1,755	5,510	340	1,080	275	34,755

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10c

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1978

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	90	90	85	10	5	30	5	50	--	365
Canada	445	--	--	--	--	--	--	--	--	--	445
Latin America	2,225	290	360	345	25	--	15	--	40	100	3,400
Western Europe	375	--	--	--	135	--	--	--	40	--	550
Middle East	2,300	275	1,525	8,685	425	1,610	4,010	250	515	135	19,730
North Africa	1,310	--	200	1,770	15	--	10	--	65	--	3,370
West Africa	975	--	300	780	60	--	--	--	--	--	2,115
East and South Africa	--	--	--	5	--	5	--	--	--	--	10
South Asia	--	--	--	5	--	--	--	--	--	--	5
South East Asia	570	--	--	20	15	--	1,085	100	--	--	1,790
Japan	5	--	--	--	--	10	--	--	--	--	15
Australasia	10	--	--	--	--	10	35	--	--	--	55
USSR, E. Europe & China	10	--	200	1,395	25	200	150	--	30	--	2,010
TOTAL IMPORTS	8,225	655	2,675	13,099	710	1,840	5,335	355	740	235	33,860

1979

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	100	225	105	--	15	35	5	--	--	485
Canada	455	--	--	--	--	--	--	--	--	--	455
Latin America	2,410	230	210	270	25	--	10	--	135	355	3,645
Western Europe	350	--	--	--	145	--	--	--	25	--	520
Middle East	2,115	260	1,535	8,685	440	1,745	4,155	285	910	305	20,435
North Africa	1,355	20	120	1,870	20	--	15	--	25	--	3,425
West Africa	1,185	--	390	1,010	60	--	--	--	--	--	2,645
East and South Africa	--	--	--	--	--	10	--	--	--	--	10
South Asia	--	--	--	--	--	10	10	--	20	--	40
South East Asia	530	--	25	25	10	--	1,215	90	20	--	1,915
Japan	--	--	--	--	--	10	--	--	--	--	10
Australasia	10	--	--	--	--	--	15	--	--	--	25
USSR, E. Europe & China	--	--	200	1,115	35	180	150	--	60	--	1,740
TOTAL IMPORTS	8,410	610	2,705	13,080	735	1,970	5,605	380	1,195	660	35,350

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10d

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1980

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	105	290	145	5	10	--	--	--	--	555
Canada	370	--	--	30	--	10	10	--	--	25	445
Latin America	2,050	215	275	625	50	--	80	5	235	350	3,885
Western Europe	355	5	--	--	85	5	--	--	10	--	460
Middle East	1,555	300	1,615	7,275	445	1,745	3,560	220	695	100	17,510
North Africa	1,015	5	135	1,440	15	--	55	--	155	--	2,820
West Africa	985	5	420	990	60	--	15	--	--	--	2,475
East and South Africa	--	--	--	--	--	10	--	--	--	--	10
South Asia	--	--	--	--	--	--	5	--	35	--	40
South East Asia	405	--	--	15	25	--	1,075	140	45	--	1,705
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	--	--	--	5	--	10	5	--	--	--	20
USSR, E. Europe & China	--	--	205	1,300	--	225	180	--	95	--	2,005
TOTAL IMPORTS	6,735	635	2,940	11,825	685	2,020	4,985	365	1,270	475	31,935

1981

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	95	260	135	5	40	40	10	10	10	605
Canada	425	--	5	15	5	--	--	--	--	5	455
Latin America	1,950	295	220	880	105	--	155	25	380	370	4,380
Western Europe	525	5	--	--	105	10	5	--	110	--	760
Middle East	1,255	195	1,395	5,750	385	1,755	3,020	180	555	115	14,605
North Africa	655	30	70	1,350	--	--	70	--	--	--	2,175
West Africa	720	5	285	660	40	--	20	--	--	--	1,730
East and South Africa	--	--	--	--	10	5	5	--	--	--	20
South Asia	--	--	--	--	--	5	5	5	30	--	45
South East Asia	395	--	--	50	20	--	950	95	150	--	1,660
Japan	--	--	--	--	--	5	--	5	--	--	10
Australasia	5	--	--	--	--	10	--	--	--	--	15
USSR, E. Europe & China	20	--	185	1,405	--	240	190	--	155	--	2,195
TOTAL IMPORTS	5,950	625	2,420	10,245	675	2,070	4,460	320	1,390	500	28,655

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10e

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1982

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	90	315	225	10	65	75	10	10	15	815
Canada	470	--	--	10	--	--	5	--	--	--	485
Latin America	2,050	180	415	750	100	10	150	--	150	330	4,135
Western Europe	580	25	30	--	155	10	--	5	160	--	965
Middle East	770	95	920	4,625	275	1,640	2,755	155	425	--	11,660
North Africa	245	15	125	1,500	20	--	45	--	190	5	2,145
West Africa	605	5	105	700	45	--	--	--	40	--	1,500
East and South Africa	--	--	--	--	20	5	--	--	--	--	25
South Asia	--	--	--	45	--	5	5	5	10	--	70
South East Asia	275	--	--	25	20	--	890	135	135	--	1,480
Japan	--	--	--	5	--	5	--	5	--	--	15
Australasia	5	--	--	--	--	--	20	--	--	--	25
USSR, E. Europe & China	40	--	200	1,465	--	240	210	5	85	--	2,245
TOTAL IMPORTS	5,040	410	2,110	9,350	645	1,980	4,155	320	1,205	350	25,565

1983

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	80	255	185	15	80	105	15	5	--	740
Canada	540	--	--	--	--	--	5	--	--	--	545
Latin America	2,160	125	425	820	65	5	180	5	160	120	4,065
Western Europe	550	15	25	--	145	5	--	5	105	10	860
Middle East	575	60	855	3,415	405	1,615	2,750	120	545	15	10,355
North Africa	280	25	60	1,675	5	--	40	--	95	--	2,180
West Africa	475	15	115	755	25	--	5	--	35	--	1,425
East and South Africa	--	--	--	--	--	5	--	--	--	--	5
South Asia	--	--	--	5	10	25	15	10	--	--	65
South East Asia	345	--	--	25	20	--	780	85	55	90	1,400
Japan	--	--	--	--	--	10	--	--	--	--	10
Australasia	5	--	--	--	--	10	30	--	5	--	50
USSR, E. Europe & China	60	--	220	1,785	--	240	235	5	110	--	2,655
TOTAL IMPORTS	4,990	320	1,955	8,665	690	1,995	4,145	245	1,115	235	24,355

* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10f

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1984

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	85	255	205	10	60	90	10	5	--	720
Canada	625	--	--	--	--	--	5	--	--	25	655
Latin America	2,255	125	420	875	65	--	185	--	120	55	4,100
Western Europe	620	25	40	--	80	--	--	5	75	15	860
Middle East	615	70	700	3,045	340	1,555	2,830	110	525	55	9,845
North Africa	315	30	80	1,650	35	--	25	--	155	--	2,290
West Africa	445	5	105	965	55	--	--	--	40	55	1,670
East & South Africa	--	--	--	--	5	--	--	--	--	10	15
South Asia	--	--	--	20	5	10	15	--	--	5	55
South East Asia	375	--	--	35	10	--	880	105	65	130	1,600
Japan	--	--	--	--	--	10	--	--	--	5	15
Australasia	40	--	--	--	--	15	10	--	--	--	60
USSR, E. Europe & China	90	00	200	1,800	--	385	270	--	120	--	2,865
TOTAL IMPORTS	5,380	340	1,800	8,595	605	2,035	4,305	230	1,105	355	24,750

1985

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	70	285	165	10	65	105	5	5	60	770
Canada	750	--	--	5	--	--	--	--	--	--	755
Latin America	2,005	120	320	805	55	70	145	--	45	--	3,565
Western Europe	470	70	15	--	65	5	5	--	95	85	805
Middle East	425	50	635	3,020	350	1,390	2,715	65	690	--	9,340
North Africa	205	35	100	1,725	20	--	55	--	275	--	2,415
West Africa	505	10	170	965	80	10	--	--	25	--	1,765
East and South Africa	--	--	--	--	15	--	--	--	--	--	15
South Asia	--	--	--	20	--	5	10	--	--	10	45
South East Asia	410	--	--	50	30	--	815	100	80	75	1,555
Japan	--	--	--	--	--	15	--	--	--	--	15
Australasia	40	--	--	--	--	40	65	--	--	--	145
USSR, E.Europe & China	100	--	295	1,610	5	465	280	--	1,610	50	4,415
TOTAL IMPORTS	4,910	355	1,820	8,365	630	2,065	4,195	170	2,825	280	25,605

* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source: BP Statistical Review of World Energy

Section IX
Table 10g

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1986

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	85	240	205	5	75	35	10	30	80	765
Canada	670	--	--	5	--	--	--	--	--	--	675
Latin America	2,205	75	160	630	55	80	210	--	70	115	3,600
Western Europe	615	130	25	--	110	--	15	--	90	105	1,090
Middle East	915	95	570	3,520	335	1,430	2,715	100	930	270	10,880
North Africa	275	--	--	1,830	15	--	30	--	365	--	2,515
West Africa	640	45	150	1,060	80	--	--	--	5	--	1,980
East and South Africa	--	--	--	5	--	--	--	--	--	--	5
South Asia	20	--	--	15	--	--	15	10	--	--	60
South East Asia	525	--	--	5	5	--	795	70	110	40	1,550
Japan	--	--	--	--	--	10	--	--	10	--	20
Australasia	30	--	--	--	--	30	45	--	--	--	105
USSR, E.Europe & China	150	--	475	1,585	--	350	280	--	1,570	35	4,445
TOTAL IMPORTS	6,045	430	1,620	8,860	605	1,975	4,140	190	3,180	645	27,690

1987

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	85	95	180	5	70	30	5	10	55	745
Canada	610	--	--	5	--	--	15	--	--	--	630
Latin America	2,170	50	--	245	--	20	190	5	--	355	3,035
Western Europe	585	150	25	--	120	5	--	5	50	115	1,055
Middle East	1,120	35	255	3,375	330	1,555	2,710	110	825	--	10,315
North Africa	340	--	10	1,605	--	35	40	--	405	--	2,435
West Africa	855	25	60	835	60	5	5	--	35	--	1,880
East and South Africa	--	--	--	5	--	--	--	--	--	--	5
South Asia	25	--	--	5	--	5	15	5	--	--	55
South East Asia	330	--	10	5	--	--	825	80	50	55	1,355
Japan	5	--	--	--	--	20	--	--	5	--	30
Australasia	55	--	--	--	--	50	35	--	--	--	140
USSR, E. Europe and China	150	--	345	1,645	30	255	260	--	1,690	105	4,480
TOTAL IMPORTS	6,245	345	1,000	7,905	545	2,020	4,125	220	3,070	685	26,160

** Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source: BP Statistical Review of World Energy.

HISTORICAL U.S. IMPORTS OF CRUDE OIL AND REFINED PRODUCTS: 1918-1946

	Crude Oil		Refined Products	
	Thous. of Bbls	Thous. of B/D	Thous. of Bbls	Thous. of B/D
1918	5,884	16	62,128	170
1919	6,348	17	57,500	158
1920	9,295	25	70,281	192
1921	9,627	26	62,215	170
1922	10,805	30	63,759	175
1923	17,534	48	84,713	232
1924	18,239	50	99,291	271
1925	13,337	37	100,841	276
1926	15,407	42	116,881	320
1927	15,844	43	126,159	346
1928	18,966	52	136,374	373
1929	26,401	72	137,133	376
1930	23,705	65	133,164	365
1931	25,535	70	99,146	272
1932	27,393	75	76,134	208
1933	36,584	100	70,430	193
1934	41,127	113	73,707	202
1935	51,430	141	77,925	213
1936	50,313	137	82,056	224
1937	67,234	184	106,077	291
1938	77,254	212	116,891	320
1939	72,076	197	117,473	322
1940	51,496	141	78,970	216
1941	33,238	91	75,592	207
1942	33,834	93	83,073	228
1943	41,342	113	108,615	298
1944	34,238	94	173,378	474
1945	32,998	90	149,985	411
1946	42,436	116	110,687	303

Source: Department of Interior, Bureau of Mines, Minerals Industry Surveys and "Annual Petroleum Statements".

SECTION X. EXPORTS

Table 1. Total U.S. Domestic Production and Exports of Petroleum

Table 2. U.S. Exports of Petroleum to Selected Areas

Table 3. African Oil Exports to Selected Areas

Table 4. Middle East Oil Exports to Selected Areas

Table 5. The Role of Middle East and African Oil in Western European and Japanese Consumption

Table 6. The Role of Middle East and African Oil in World Exports

Section X
Table 1

TOTAL U.S. DOMESTIC PRODUCTION AND EXPORTS OF CRUDE OIL AND ITS PRODUCTS
(Thousands of barrels)

Year	Production(1)	Exports	Exports As a % of U.S. Production
1947	1,989,850	164,477	8.3
1948	2,167,264	134,674	6.2
1949	1,999,215	119,376	6.0
1950	2,155,693	111,306	5.2
1951	2,452,465	154,052	6.3
1952	2,513,351	158,188	6.3
1953	2,596,661	146,591	5.6
1954	2,567,121	129,733	5.1
1955	2,765,799	134,188	4.9
1956	2,910,010	157,386	5.4
1957	2,911,891	207,187	7.1
1958	2,743,736	100,638	3.7
1959	2,895,347	77,067	2.7
1960	2,915,090	73,906	2.5
1961	2,983,447	63,563	2.1
1962	3,048,894	61,390	2.0
1963	3,153,609	75,914	2.4
1964	3,209,293	73,879	2.3
1965	3,290,070	68,288	2.1
1966	3,496,398	72,400	2.1
1967	3,730,198	112,060	3.0
1968	3,879,353	84,544	2.2
1969	3,951,992	84,885	2.1
1970	4,123,366	94,458	2.3
1971	4,071,729	81,685	2.0
1972	4,093,584	81,389	2.0
1973	3,995,326	84,413	2.1
1974	3,818,683	80,491	2.1
1975	3,652,737	76,428	2.1
1976	3,563,225	81,599	2.3
1977	3,599,720	88,588	2.5
1978	3,750,302	132,057	3.5
1979	3,699,333	171,856	4.6
1980	3,722,152	199,256	5.4
1981	3,715,743	217,024	5.8
1982	3,722,591	297,514	8.0
1983	3,730,085	269,890	7.2
1984	3,846,173	264,077	6.9

(1) Figures include crude oil, lease condensate and natural gas liquids.

Source: U.S. Energy Information Administration, Annual Petroleum Statements
1981-1984 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. DOMESTIC PRODUCTION AND EXPORTS OF CRUDE OIL AND ITS PRODUCTS
(Thousands of barrels)

Year	Production(1)	Exports	Exports As a % of U.S. Production
1985	3,861,911	285,069	7.4
1986	3,734,252	286,373	7.7
1987	3,629,669	278,731	7.7
1988(p)	3,568,334	299,833	8.4

(p) Preliminary.
(1) Figures include crude oil, lease condensate and natural gas liquids.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	CANADA		MEXICO		CARIBBEAN(1)		OTHER LATIN AMERICAN		UNITED KINGDOM		OTHER EUROPEAN	
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products
1947	39,058	18,266	101	4,446	1,354	5,854	1,120	3,279	299	28,565	4,424	20,674
1948	33,298	20,629	62	4,157	1,498	8,788	1,417	3,439	471	16,223	2,991	13,150
1949	29,996	15,137	43	5,037	1,763	8,496	295	4,186	424	12,410	547	12,423
1950	30,708	15,953	--	6,229	1,829	7,278	661	4,141	441	5,868	851	8,227
1951	21,172	17,867	--	7,034	2,167	9,729	1,356	3,932	457	13,914	1,048	12,284
1952	20,172	25,211	--	7,130	2,513	13,703	1,789	4,295	499	9,889	976	9,466
1953	14,025	26,939	--	8,281	2,620	10,399	1,081	3,515	418	9,201	926	7,809
1954	8,130	22,635	--	12,003	2,928	7,185	608	5,003	462	7,687	745	5,424
1955	6,501	20,329	--	16,062	3,136	7,713	236	6,426	532	8,875	650	7,385
1956	5,570	20,560	--	16,485	3,262	9,979	--	5,007	5,238	10,831	13,377	14,560
1957	8,240	18,307	902	15,950	3,283	11,120	--	7,110	14,880	19,660	21,003	29,660
1958	1,153	13,497	696	11,568	592	7,977	--	3,661	378	6,010	450	9,420
1959	--	16,061	21	8,297	--	3,978	--	4,753	405	6,592	550	9,515
1960	--	12,622	--	6,428	--	3,315	--	4,131	433	3,840	568	10,395
1961	20	8,381	133	4,415	--	3,721	1	3,143	437	3,268	355	9,401
1962	8	7,706	--	4,981	--	2,888	--	3,417	428	2,616	--	10,290
1963	2	7,985	3	6,889	--	3,481	--	3,036	424	3,443	1	19,933
1964	7	9,791	3	8,920	--	4,503	--	3,656	336	3,191	--	14,387
1965	12	9,619	333	9,452	--	3,322	1	2,635	352	3,924	--	13,365
1966	2	11,715	203	13,955	--	2,179	--	3,240	431	3,784	1	13,522
1967	3,688	14,521	18	12,999	645	3,479	--	4,444	16,959	5,562	4,604	15,318
1968	5	14,126	114	11,140	283	1,603	--	5,138	352	4,838	--	14,912
1969	30	16,017	1	12,098	220	2,511	--	5,829	430	4,421	--	17,005
1970	328	10,855	--	12,142	4,264	3,272	--	4,565	176	4,185	--	20,250
1971	60	9,384	--	15,180	181	4,474	--	5,484	120	3,053	--	19,406
1972	--	9,599	--	15,061	--	3,888	--	4,374	--	3,705	--	24,033
1973	--	11,427	--	15,984	--	3,614	--	4,294	--	3,249	177	24,863
1974	108	11,504	--	12,885	966	3,023	--	4,005	--	2,317	--	24,238

N.A. Not Available
(1) As of 1971, includes exports to Puerto Rico and Virgin Islands.

Source: U.S. Bureau of Mines: 1947-1974, Minerals Yearbook.

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	MIDDLE EAST		JAPAN		OTHER ASIAN		AFRICA		TOTAL
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	U.S. EXPORTS
1947	N.A.		--	--	--	14,565	--	2,786	164,477
1948	N.A.		--	--	--	8,570	--	2,400	134,674
1949	N.A.		--	364	--	7,176	--	2,922	119,376
1950	N.A.		334	92	--	2,953	--	1,916	111,306
1951	N.A.		2,403	4,878	--	11,406	--	4,783	154,052
1952	N.A.		748	7,286	--	13,126	--	5,896	158,188
1953	N.A.		862	10,508	--	8,740	--	5,043	146,591
1954	N.A.		726	8,166	--	5,996	--	2,734	129,733
1955	N.A.		515	11,282	--	4,363	--	1,636	134,188
1956	N.A.		1,055	9,790	--	4,309	122	2,154	157,386
1957	N.A.		1,057	13,642	339	6,431	539	3,328	207,187
1958	N.A.		1,076	12,486	--	4,491	--	2,368	100,638
1959	N.A.		1,548	16,153	--	5,819	--	2,383	77,067
1960	N.A.		2,086	20,595	-	5,891	--	2,332	73,906
1961	N.A.		2,218	19,255	55	5,930	--	1,686	63,563
1962	N.A.		1,354	18,333	--	6,544	--	2,655	61,390
1963	N.A.		1,266	20,080	1	7,316	--	3,066	75,914
1964	N.A.		952	19,429	63	6,602	--	2,206	73,879
1965	N.A.		306	14,466	--	7,648	--	1,596	68,288
1966	N.A.		808	12,283	31	7,077	1	2,019	72,400
1967	N.A.		626	17,938	--	7,299	1	2,179	112,060
1968	N.A.		1,048	19,566	--	7,779	--	2,026	84,545
1969	N.A.		755	16,314	--	7,364	--	1,849	84,885
1970	N.A.		223	24,868	--	6,433	--	1,475	94,458
1971	--	1,028	139	13,941	1	7,697	2	1,695	81,845
1972	--	1,158	187	11,475	--	6,165	--	1,744	81,389
1973	--	957	520	11,782	--	5,888	--	1,658	84,413
1974	--	1,146	--	13,809	--	4,728	--	1,762	80,491

(2) Total includes a quantity of refined products exported to an undesignated area whose destination is undisclosed for security reasons: 1950-5,612, 1951-16,384, 1952-18,653, 1953-18,206, 1954-21,941, 1955-20,239, 1956-18,715, 1957-15,221, 1958-12,419.

Source: U.S. Bureau of Mines: 1947-74, Minerals Yearbook

Section X
Table 2b

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	CANADA*/		MEXICO		CARIBBEAN(1)		OTHER LATIN AMERICAN		UNITED KINGDOM		OTHER EUROPEAN	
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products
1975	19	8,139	--	15,425	2,127	3,114	--	3,386	--	2,636	--	24,846
1976	2,241	8,096	--	12,677	700	8,772	--	3,474	--	2,732	--	27,220
1977	16,460	9,548	--	8,893	1,795	3,566	--	3,338	--	3,136	--	25,933
1978	28,761	10,640	--	9,877	28,967	3,373	--	4,459	--	2,447	--	26,457
1979	26,079	10,299	--	7,835	59,628	3,538	--	4,718	--	2,493	--	37,497
1980	30,567	8,822	--	10,085	74,367	9,942	--	4,006	--	2,386	--	34,885
1981	16,440	16,102	--	9,416	65,104	18,692	--	2,781	--	1,971	--	47,710
1982	13,083	18,019	--	19,464	67,633	23,531	--	6,714	--	5,167	--	77,969
1983	6,781	21,047	--	8,812	46,431	21,026	--	6,966	--	3,047	--	66,025
1984	5,784	24,672	--	12,681	49,498	20,570	--	11,046	--	5,291	--	56,913
1985	7,523	19,463	--	22,187	55,019	20,772	--	10,174	--	5,210	--	55,580
1986	6,040	25,027	--	20,525	39,954	20,225	--	11,408	--	3,095	--	70,183
1987	5,988	24,247	--	25,544	47,864	27,966	--	6,943	7	2,359	--	56,432

(1) Includes exports to Puerto Rico and Virgin Islands

Source: 1975-1980: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals.

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	MIDDLE EAST		JAPAN		OTHER ASIAN		AFRICA		TOTAL
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	U.S. EXPORTS
1975	--	995	--	10,012	--	3,550	--	2,179	76,428
1976	--	1,280	--	9,326	--	3,725	--	2,356	81,599
1977	--	1,034	--	8,951	--	4,213	--	1,721	88,588
1978	--	1,380	--	9,642	--	4,802	--	1,252	132,057
1979	--	1,085	--	12,543	--	4,416	--	1,725	171,856
1980	--	1,291	--	11,596	--	9,028	--	2,280	199,256(1)
1981	--	1,912	--	14,014	7	16,715	--	2,595	217,024(1)
1982	--	2,182	--	24,836	--	28,077	--	2,791	297,514(1)
1983	--	1,808	--	38,132	--	35,904	--	3,097	269,854(1)
1984	--	1,750	--	33,657	--	24,263	--	2,724	264,077(1)
1985	--	1,315	--	39,468	--	18,215	--	2,668	285,069(1)
1986	--	2,375	--	39,975	--	30,592	--	2,345	286,373(1)
1987	--	3,107	--	43,799	1,105	29,693	--	1,337	278,732(1)

(1) Includes exports to Greenland, and other. Includes exports to Puerto Rico and Virgin Islands

Source: 1975-1980: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals.

AFRICAN OIL EXPORTS TO SELECTED AREAS
(Thousands of barrels per day)

Year(1)	United States	Western Europe	Japan	All Others	African Exports
1960	--	237	--	--	237
1961	5	430	--	--	435
1962	25	740	--	--	765
1963	25	1,125	--	30	1,180
1964	55	1,565	--	30	1,650
1965	70	2,040	--	30	2,140
1966	90	2,540	5	130	2,765
1967	55	2,700	--	155	2,910
1968	170	3,535	5	165	3,875
1969	330	4,370	15	230	4,945
1970	125	5,330	50	300	5,805
1971	195	4,430	60	805	5,490
1972	495	3,900	75	920	5,390
1973	875	3,575	130	1,005	5,585
1974	1,025	3,215	170	760	5,170
1975	1,350	2,365	140	560	4,415
1976	2,000	2,540	70	720	5,330
1977	2,540	2,580	25	540	5,685
1978	2,285	2,555	--	655	5,495
1979	2,540	2,880	15	645	6,080
1980	2,000	2,430	70	805	5,305
1981	1,375	2,010	95	445	3,925
1982	850	2,200	45	575	3,670
1983	755	2,430	45	380	3,610
1984	760	2,615	25	575	3,975
1985	705	2,690	55	745	4,195
1986	915	2,895	30	660	4,500
1987	1,195	2,445	45	635	4,320

(1) Not available prior to 1960

Source: "BP Statistical Review of the World Energy," Annual

Section X
Table 4

MIDDLE EAST OIL EXPORTS TO SELECTED AREAS
(Thousands of barrels per day)

Year(1)	United States	Western Europe	Japan	All Others	Middle East Exports
1959	355	2,528	--	1,060	4,120
1960	347	2,724	--	1,619	4,690
1961	345	2,855	610	1,280	5,090
1962	315	3,060	720	1,490	5,585
1963	295	3,400	920	1,540	6,155
1964	310	3,740	1,115	1,760	6,925
1965	350	4,195	1,435	1,630	7,610
1966	320	4,375	1,650	2,280	8,625
1967	200	4,605	2,035	2,305	9,145
1968	270	5,065	2,650	2,460	10,445
1969	265	5,780	3,055	2,425	11,525
1970	175	6,220	3,485	2,835	12,715
1971	390	7,685	3,810	3,365	15,250
1972	475	8,570	3,770	4,135	16,950
1973	820	10,350	4,385	4,415	19,970
1974	1,025	10,195	4,050	4,780	20,050
1975	1,140	8,815	3,675	4,875	18,505
1976	1,910	9,405	3,955	5,585	20,855
1977	2,560	8,855	4,095	5,220	20,730
1978	2,300	8,685	4,010	4,735	19,730
1979	2,115	8,685	4,155	5,480	20,435
1980	1,555	7,275	3,560	5,120	17,510
1981	1,255	5,750	3,020	4,580	14,605
1982	770	4,625	2,755	3,510	11,660
1983	575	3,415	2,750	3,615	10,355
1984	615	3,045	2,830	3,355	9,845
1985	425	3,020	2,715	3,180	9,346
1986	915	3,520	2,715	3,730	10,880
1987	1,120	3,375	2,710	3,110	10,315

(1) Not available prior to 1959.

Source: BP Statistical Review of the World Energy, Annual.

Section X
Table 5

THE ROLE OF MIDDLE EAST AND AFRICAN OIL ON WESTERN EUROPEAN AND JAPANESE CONSUMPTION
(Thousands of Barrels Per Day)

	WESTERN EUROPE			JAPAN		
Year	Consumption	From the Middle East	From Africa	Consumption	From the Middle East	From Africa
1961	4,453	2,855	430	821	610	--
1962	5,128	3,060	740	934	720	--
1963	5,893	3,400	1,125	1,212	920	--
1964	6,692	3,740	1,565	1,484	1,115	--
1965	7,525	4,195	2,040	1,743	1,435	--
1966	8,360	4,375	2,540	1,979	1,650	5
1967	8,937	4,605	2,700	2,144	2,035	--
1968	9,958	5,065	3,535	2,660	2,650	5
1969	11,378	5,780	4,370	3,250	3,055	15
1970	12,364	6,220	5,330	3,847	3,485	50
1971	12,912	7,685	4,430	4,179	3,810	60
1972	13,847	8,570	3,900	4,364	3,770	75
1973	14,492	10,350	3,575	5,071	4,385	130
1974	13,681	10,195	3,215	4,960	4,050	170
1975	12,603	8,815	2,365	4,502	3,675	140
1976	13,448	9,405	2,540	4,771	3,955	70
1977	14,235	8,855	2,580	5,345	4,095	25
1978	14,630	8,685	2,555	5,420	4,012	10
1979	15,037	8,685	2,880	5,480	4,155	15
1980	13,826	7,275	2,430	4,960	3,560	70
1981	12,775	5,750	2,010	4,695	3,020	95
1982	12,210	4,625	2,200	4,395	2,755	45
1983	11,940	3,415	2,430	4,390	2,750	45
1984	12,050	3,045	2,615	4,565	2,830	25
1985	11,865	3,020	2,690	4,380	2,715	55
1986	12,340	3,520	2,895	4,435	2,715	30
1987	12,345	3,375	2,445	4,510	2,710	45

Source: 1961-1980: Western Europe and Japanese Consumption: U.S. Department of Energy, International Petroleum Annual
1981-1986: Western Europe and Japanese Consumption: BP Statistical Review of World Energy
1961-1986: Middle East and African Exports: BP Statistical Review of World Energy
1987: BP Statistical Review of World Energy

Section X
Table 6

THE ROLE OF MIDDLE EAST AND AFRICAN OIL IN WORLD EXPORTS
(Thousands of Barrels/Day)

	MIDDLE EAST		AFRICA		TOTAL WORLD	
Year	Production	Exports	Production	Exports	Production	Exports
1961	5,633	5,090	489	435	22,428	9,870
1962	6,186	5,585	804	765	24,334	11,285
1963	6,812	6,155	1,190	1,180	26,132	12,205
1964	7,613	6,925	1,704	1,650	28,168	13,625
1965	8,367	7,610	2,224	2,140	30,308	15,110
1966	9,338	8,625	2,821	2,765	32,936	16,890
1967	10,048	9,145	3,117	2,910	35,382	17,905
1968	11,298	10,445	3,992	3,875	38,651	20,400
1969	12,447	11,525	5,069	4,945	41,706	22,640
1970	13,957	12,715	6,069	5,805	45,805	25,420
1971	16,381	15,250	5,645	5,490	48,391	27,285
1972	18,116	16,950	5,699	5,390	50,822	30,095
1973	21,219	19,970	5,922	5,585	55,803	34,130
1974	21,882	20,050	5,452	5,170	56,268	33,330
1975	19,619	18,505	5,003	4,415	53,418	30,335
1976	22,174	20,855	5,832	5,330	58,059	34,300
1977	22,600	20,730	6,236	5,685	62,620	34,755
1978	21,415	19,730	6,115	5,495	63,085	33,860
1979	21,558	20,435	6,640	6,080	62,658	35,350
1980	18,407	17,510	6,031	5,305	59,454	31,935
1981	15,752	14,605	4,581	3,925	55,837	28,655
1982	12,664	11,660	4,465	3,670	53,092	25,565
1983	11,550	10,335	4,410	3,610	52,625	24,355
1984	11,279	9,845	4,683	3,975	53,674	24,750
1985	10,305	9,340	4,855	4,195	52,931	25,605
1986	12,710	10,880	4,986	4,500	55,684	27,690
1987(1)	13,115	10,315	5,225	4,320	60,200	26,160

(1) Production figures for 1987 include crude oil, shale oil, oil sands and natural gas liquids.

Source: 1961-1978: Total World, Middle East and African Production, U.S. Department of Energy, International Petroleum Annual
1979-1986: Total World, Middle East and African Production, CIA, International Energy Statistical Review
1961-1986: Total World, Middle East and African Exports, BP Statistical Review of the World Oil Industry
1987: BP Statistical Review of World Energy

BASIC PETROLEUM DATA BOOK

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ESTIMATED WORLDWIDE PRODUCTION OF CRUDE OIL
ONSHORE vs OFFSHORE
(Thousands of Barrels)

Year	Onshore Production	Offshore Production	Total World Production
1969	12,961,336	2,261,175	15,222,511
1970	13,961,668	2,757,040	16,718,708
1971	14,649,885	3,012,908	17,662,793
1972	15,346,357	3,254,388	18,600,745
1973	16,729,330	3,638,651	20,367,[illegible]81
1974	17,140,035	3,397,692	20,537,727
1975	16,316,198	3,186,137	19,502,335
1976	17,661,041	3,530,499	21,191,540
1977	17,738,887	4,161,808	21,900,695
1978	17,961,621	4,196,630	22,158,251
1979	18,139,390	4,625,660	22,765,050
1980	16,754,248	5,009,916	21,764,164
1981	15,395,719	4,984,786	20,380,505
1982	14,436,115	4,942,465	19,378,580
1983	14,174,410	5,033,715	19,208,125
1984	14,040,492	5,604,192	19,644,684
1985	13,798,095	5,521,720	19,319,815
1986	15,402,270	4,922,390	20,324,660
		(Thousands of barrels per day)	
1969	35,511	6,195	41,706
1970	38,251	7,554	45,805
1971	40,126	8,255	48,381
1972	41,930	8,892	50,822
1973	45,835	9,968	55,803
1974	46,957	9,310	56,267
1975	44,689	8,729	53,418
1976	48,253	9,647	57,900
1977	48,600	11,402	60,002
1978	49,210	11,498	60,708
1979	49,852	12,518	62,370
1980	45,766	13,688	59,454
1981	42,180	13,657	55,837
1982	39,551	13,561	53,092
1983	38,834	13,791	52,625
1984	38,362	15,312	53,674
1985	37,803	15,128	52,931
1986	42,198	13,486	55,684

Source: Total World Production, U.S. Energy Information Administration
1980-1986 production, Central Intelligence Agency
United States Offshore Production, U.S. Department of Interior and U.S. Department of Energy
Rest of World Offshore Production, Offshore Magazine

Section XI
Table 2

ESTIMATED WORLDWIDE OFFSHORE PRODUCTION OF CRUDE OIL BY AREA
(Millions of Barrels)

Year	United States	Venezuela	Other Latin America	Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations(2)	Total World
1970	583.5	897.9	43.4	1,524.8	760.7	239.8	133.2	4.4	2,662.9	94.2	2,757.0
1971	625.7	908.9	69.4	1,604.0	913.4	233.9	158.4	12.0	2,921.7	91.3	3,012.9
1972	621.3	915.0	82.4	1,618.7	1,040.5	276.3	216.7	15.8	3,168.0	86.4	3,254.4
1973	583.4	985.5	65.8	1,634.7	1,282.2	323.2	287.5	24.7	3,552.2	86.1	3,638.4
1974	535.7	756.0	73.7	1,365.4	1,262.7	380.3	275.1	29.9	3,313.4	84.3	3,397.7
1975	496.5	634.0	97.4	1,228.0	1,070.3	364.9	323.2	116.5	3,102.9	83.2	3,186.1
1976	467.8	613.9	107.1	1,188.8	1,198.2	384.6	407.6	270.9	3,450.0	80.5	3,530.5
1977	439.2	456.3	107.7	1,003.1	1,648.0	490.2	549.7	396.0	4,087.0	74.8	4,161.8
1978	416.3	395.7	103.7	915.6	1,734.8	414.3	525.6	532.5	4,122.9	73.7	4,196.6
1979	398.6	383.3	255.1	1,037.0	1,934.1	355.5	490.6	736.6	4,553.8	71.9	4,625.7
1980	379.7	401.1	281.8	1,062.6	2,132.4	349.2	541.7	850.2	4,936.0	73.9	5,009.9
1981	385.4	381.1	503.0	1,269.5	1,936.3	308.8	539.5	858.5	4,912.5	72.3	4,984.8
1982	412.3	374.5	733.3	1,520.1	1,496.9	286.2	589.9	992.1	4,877.9	64.6	4,942.5
1983	426.9	411.7	747.9	1,586.5	1,322.0	296.0	604.4	1,128.7	4,969.8	63.9	5,033.7
1984	469.5	402.6	851.3	1,723.4	1,473.9	368.9	726.5	1,274.4	5,542.7	61.5	5,604.2
1985	456.1	347.1	857.4	1,660.6	1,432.6	360.6	725.3	1,253.4	5,461.5	60.2	5,521.7
1986	457.6	328.5	851.2	1,637.3	1,183.0	312.4	568.3	1,208.2	4,862.2	60.2	4,922.4
1987	436.7	387.6	847.5	1,671.8	1,337.4	396.8	661.4	1,235.2	5,302.6	75.6	5,378.2
(Thousands of barrels per day)											
1970	1,599	2,460	119	4,178	2,084	657	365	12	7,296	258	7,554
1971	1,714	2,490	190	4,394	2,503	641	434	33	8,005	250	8,255
1972	1,698	2,500	225	4,423	2,843	755	592	43	8,656	236	8,892
1973	1,598	2,700	180	4,478	3,513	885	788	68	9,732	236	9,968
1974	1,468	2,071	202	3,741	3,460	1,042	754	82	9,079	231	9,310
1975	1,360	1,737	267	3,364	2,932	1,000	886	319	8,501	228	8,729
1976	1,278	1,677	293	3,248	3,542	783	1,114	740	9,427	220	9,647
1977	1,203	1,250	295	2,748	4,960	898	1,506	1,085	11,197	205	11,402
1978	1,141	1,084	284	2,509	5,195	693	1,440	1,459	11,296	202	11,498
1979	1,092	1,050	699	2,841	5,149	974	1,344	2,018	12,326	192	12,518
1980	1,037	1,096	770	2,903	5,826	954	1,480	2,323	13,486	202	13,688
1981	1,056	1,044	1,378	3,478	5,305	846	1,478	2,352	13,459	198	13,657
1982	1,130	1,026	2,009	4,165	4,101	784	1,616	2,718	13,364	177	13,541
1983	1,170	1,128	2,049	4,347	3,622	811	1,656	3,092	13,616	175	13,791
1984	1,283	1,100	2,326	4,709	4,027	1,008	1,985	3,482	15,144	168	15,312
1985	1,250	951	2,349	4,550	3,925	988	1,987	3,434	14,963	165	15,128
1986	1,264	900	2,332	4,496	3,241	856	1,557	3,310	13,321	165	13,486
1987	1,196	1,062	2,322	4,580	3,664	1,087	1,812	3,384	14,527	207	14,734

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(1) Data not available for prior years.
(2) Only the U.S.S.R. is reported having offshore production until 1978, when China began reporting.

Source: United States Production: 1970-1971, U.S. Geological Survey; 1972-1987, U.S. Energy Information Administration
Rest of World--Offshore Magazine.

Section XI
Table 3

PRODUCTION AND VALUE OF U.S. CRUDE OIL AND CONDENSATE
ONSHORE - OFFSHORE

	PRODUCTION (Thousands of Barrels)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
Year	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
Cumulative to 1953	47,367,775	445,942	47,813,717	$81,119,901	$ 763,977	$ 81,883,878
1954	2,266,163	48,825	2,314,988	6,289,428	135,502	6,424,930
1955	2,423,885	60,543	2,484,428	6,702,949	167,431	6,870,380
1956	2,542,152	75,131	2,617,283	7,054,406	208,519	7,262,925
1957	2,531,581	85,320	2,616,901	7,815,875	263,384	8,079,259
1958	2,361,047	87,940	2,448,987	7,114,958	265,015	7,379,973
1959	2,471,886	102,704	2,574,590	7,175,225	298,111	7,473,336
1960	2,452,659	122,274	2,574,933	7,067,797	352,384	7,420,181
1961	2,483,272	138,486	2,621,758	7,165,968	399,614	7,565,582
1962	2,503,979	172,210	2,676,189	7,273,791	500,260	7,774,051
1963	2,554,958	197,765	2,752,723	7,393,484	572,259	7,965,743
1964	2,569,436	217,386	2,786,822	7,391,746	625,332	8,017,078
1965	2,606,936	241,578	2,848,514	7,466,393	691,905	8,158,298
1966	2,726,037	301,726	3,027,763	7,856,835	869,588	8,726,423
1967	2,847,820	367,922	3,215,742	8,303,050	1,072,677	9,375,727
1968	2,857,058	471,984	3,329,042	8,406,116	1,388,710	9,794,826
1969	2,841,469	530,282	3,371,751	8,786,876	1,639,804	10,426,680
1970	2,933,985	583,465	3,517,450	9,320,228	1,853,498	11,173,726
1971	2,828,217	625,697	3,453,914	9,574,694	2,118,304	11,692,998
1972	2,834,053	621,315	3,455,368	9,601,562	2,101,948	11,706,510
1973	2,777,538	583,365	3,360,903	10,791,444	2,266,461	13,057,905
1974	2,666,887	535,698	3,202,585	17,970,771	3,609,778	21,580,549

(1) Total dollar value distributed in proportion to percentages of production onshore and offshore

Source: Total U.S. Production and Total Dollar Value at Wellhead, U.S. Bureau of Mines
U.S. Offshore Production, 1973-1974, U.S. Bureau of Mines; All other years, U.S. Geological Survey
Distribution of production and value computed by the American Petroleum Institute

Section XI
Table 3a

PRODUCTION AND VALUE OF U.S. CRUDE OIL AND CONDENSATE
ONSHORE - OFFSHORE

	PRODUCTION (Thousands of Barrels)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
Year	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
1975	2,560,242	496,537	3,056,779	$19,361,086	$ 3,754,973	$23,116,059
1976	2,508,356	467,824	2,976,180	20,420,899	3,808,641	24,229,540
1977	2,546,187	439,173	2,985,360	21,996,649	3,794,073	25,790,722
1978	2,761,891	416,325	3,178,216	24,747,514	3,730,310	28,477,824
1979	2,722,715	398,595	3,121,310	34,064,477	4,986,855	39,051,332
1980	2,766,716	379,649	3,146,365	57,791,998	7,930,018	65,722,016
1981	2,743,203	385,421	3,128,624	87,151,743	12,244,641	99,396,384
1982	2,744,432	412,283	3,156,715	78,270,757	11,758,641	90,029,512
1983	2,744,080	426,919	3,170,999	71,867,673	11,180,818	83,048,491
1984	2,780,219	469,477	3,249,696	71,991,425	12,110,707	84,102,132
1985	2,818,450	456,103	3,274,553	67,868,276	10,982,960	78,851,236
1986	2,710,628	457,624	3,168,252	34,316,550	5,793,520	40,110,070
1987	2,610,699	436,679	3,047,378	40,244,801	6,715,294	46,960,095

(1) Total dollar value distributed in proportion to percentages of production onshore and offshore.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals. Distribution of production and value computed by the American Petroleum Institute.

Section XI
Table 4

ESTIMATED WORLDWIDE PRODUCTION OF NATURAL GAS
ONSHORE vs OFFSHORE
(Millions of cubic feet)

Year	Onshore Production	Offshore Production	Total World Production
1970	32,763,671	5,330,290(1)	38,093,961
1971	N.A.	N.A.	41,188,396
1972	N.A.	N.A.	43,524,559
1973	N.A.	N.A.	46,143,601
1974	N.A.	N.A.	47,178,520
1975	39,985,557	7,532,217	47,517,774
1976	37,455,724	10,849,960	48,305,684
1977	42,518,548	7,581,542	50,100,090
1978	42,210,443	9,538,859	51,749,302
1979	42,748,966	10,0092,084	52,841,050
1980	43,949,440	10,189,646	54,139,086
1981	43,326,868	10,787,132	54,115,000
1982	43,023,688	10,671,312	53,695,000
1983	45,280,283	10,488,325	55,768,608
1984	45,406,112	13,186,128	58,592,240
1985	47,799,258	13,186,128	60,383,680
1986	49,132,600	12,348,680	61,481,280
		(Millions of cubic feet per day)	
1970	89,763	14,604	104,367
1971	N.A.	N.A.	112,845
1972	N.A.	N.A.	118,920
1973	N.A.	N.A.	126,421
1974	N.A.	N.A.	129,256
1975	109,550	20,636	130,186
1976	102,338	29,645	131,983
1977	116,490	20,771	137,261
1978	115,645	26,134	141,779
1979	117,120	27,650	144,770
1980	120,080	27,841	147,921
1981	118,706	29,554	148,260
1982	117,874	29,236	147,110
1983	124,407	28,384	152,791
1984	126,763	33,325	160,088
1985	131,322	34,113	165,435
1986	134,610	33,832	168,442

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(1) Reflects Free World offshore production since Communist Nation production figures are not available prior to 1973.

Source: Offshore Production, Offshore Magazine and U.S. Department of Interior
Total World Production, 1970-78, U.S. Energy Information Administration, World Natural Gas
1979-80, Central Intelligence Agency, International Energy Statistical Review
1981-86, British Petroleum, BP Statistical Reveiw of World Energy

Section XI
Table 5

ESTIMATED WORLDWIDE OFFSHORE PRODUCTION OF NATURAL GAS BY AREA
(Billions of cubic feet)

	WESTERN HEMISPHERE									
Year	United States	Latin America	Total	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1970	3,287.4	27.6	3,315.0	1,568.0	28.7	22.2	396.5	5,330.3	N.A.	N.A.
1971	3,590.9	26.8	3,617.7	214.3	N.A.	35.8	654.9	N.A.	N.A.	N.A.
1972	3,883.9	26.3	3,910.2	252.6	N.A.	44.6	937.1	N.A.	N.A.	N.A.
1973	3,976.5	28.3	4,004.8	263.4	N.A.	102.8	1,095.0	N.A.	244.6	N.A.
1974	4,246.5	39.9	4,286.4	259.7	N.A.	135.9	1,314.0	N.A.	264.6	N.A.
1975	4,164.7	54.0	4,218.7	1,396.1	114.6	132.1	1,388.1	7,249.7	282.5	7,532.2
1976	4,315.4	123.3	4,438.7	259.9	183.0	233.9	5,406.2	10,521.7	328.3	10,850.0
1977	4,496.9	134.7	4,631.6	334.0	79.9	464.6	1,707.8	7,218.0	363.5	7,581.5
1978	5,134.0	219.7	5,353.8	365.4	80.7	897.5	2,453.2	9,150.5	388.4	9,538.9
1979	5,444.9	201.5	5,646.4	362.1	182.5	759.9	2,717.4	9,668.3	423.8	10,092.1
1980	5,382.2	223.3	5,605.5	546.1	185.9	712.6	2,691.2	9,741.3	448.4	10,189.6
1981	5,546.5	495.3	6,041.8	259.2	123.7	793.5	3,082.8	10,301.0	486.2	10,787.1
1982	5,466.1	576.0	6,042.1	115.7	211.7	832.9	3,081.3	10,283.7	518.3	10,802.0
1983	4,734.8	583.6	5,318.4	529.3	304.4	1,190.6	3,181.3	10,524.0	540.9	11,064.9
1984	5,220.1	1,260.1	6,480.2	504.4	279.6	1,420.4	4,081.6	12,766.2	556.3	13,322.5
1985	4,631.8	1,252.0	6,883.8	504.4	279.2	1,416.6	4,070.5	12,154.5	538.4	12,692.9
1986	4,588.6	1,023.1	5,611.7	460.1	273.4	1,961.5	4,098.6	11,405.3	474.5	12,879.8
1987	*4,147.8	1,006.8	5,154.6	497.5	92.0	1,821.0	3,611.7	11,176.8	511.0	11,687.8

(Millions of cubic feet per day)

	WESTERN HEMISPHERE									
Year	United States	Latin America	Total	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1970	9,007	75	9,082	4,296	79	61	1,086	14,604	N.A.	N.A.
1971	9,838	73	9,911	587	N.A.	98	1,794	N.A.	N.A.	N.A.
1972	10,612	72	10,684	690	N.A.	122	2,560	N.A.	N.A.	N.A.
1973	10,894	78	10,972	722	N.A.	282	3,000	N.A.	670	N.A.
1974	11,634	109	11,743	711	N.A.	372	3,600	N.A.	725	N.A.
1975	11,410	148	11,558	3,825	314	362	3,803	19,862	774	20,636
1976	11,791	337	12,128	710	500	639	14,771	28,748	897	29,645
1977	12,320	369	12,689	915	219	1,273	4,679	19,775	996	20,771
1978	14,066	602	14,668	1,001	221	2,459	6,721	25,070	1,064	26,134
1979	14,918	552	15,470	992	500	2,082	7,445	26,489	1,161	27,650
1980	14,706	610	15,316	1,492	508	1,947	7,353	26,616	1,225	27,841
1981	15,196	1,357	16,553	710	339	2,174	8,446	28,222	1,332	29,554
1982	14,935	1,488	16,423	317	580	2,282	8,442	28,044	1,420	29,464
1983	12,297	1,599	13,896	1,450	834	3,262	8,716	28,158	1,482	29,640
1984	14,430	3,443	17,873	1,382	764	3,675	10,875	34,569	1,520	36,089
1985	12,690	3,430	16,120	1,382	765	3,881	11,152	33,300	1,475	34,775
1986	12,537	2,803	15,340	1,257	749	5,374	11,229	33,949	1,300	35,249
1987	*11,364	2,758	14,122	1,363	252	4,989	9,895	30,621	1,400	32,021

* Estimate from Offshore Magazine.
N.A. Not Available

Source: U.S. Production--U.S. Department of Interior, Minerals Management Service.
Rest of World--Offshore Magazine

Section XI
Table 6

PRODUCTION AND VALUE OF U.S. NATURAL GAS
ONSHORE - OFFSHORE

	PRODUCTION (Millions of Cubic Feet)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
Year	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
Cumulative to 1953	142,838,325	91,675	142,930,000	$ --	$ --	$ --
1954	8,671,935	70,611	8,742,546	875,370	7,131	882,501
1955	9,296,219	109,132	9,405,351	967,008	11,349	978,357
1956	9,957,253	124,670	10,081,923	1,070,405	13,407	1,083,812
1957	10,527,855	152,403	10,680,258	1,184,610	17,149	1,201,759
1958	10,806,671	223,607	11,030,298	1,290,786	26,706	1,317,492
1959	11,732,065	314,050	12,046,115	1,516,214	40,856	1,556,800
1960	12,362,872	408,166	12,771,038	1,732,763	57,207	1,789,970
1961	12,802,998	451,027	13,254,025	1,928,309	67,932	1,996,241
1962	13,246,639	629,983	13,876,622	2,047,904	97,397	2,145,301
1963	13,906,600	759,959	14,666,559	2,207,391	120,639	2,328,030
1964	14,622,301	839,842	15,462,143	2,257,990	129,699	2,387,689
1965	15,108,715	931,038	16,039,753	2,349,734	144,808	2,494,542
1966	15,846,670	1,359,958	17,206,628	2,489,133	213,626	2,702,759
1967	16,472,127	1,699,198	18,171,325	2,710,170	279,571	2,989,741
1968	17,002,857	2,319,543	19,322,400	2,788,319	380,369	3,168,688
1969	17,952,811	2,745,429	20,698,240	2,997,262	458,353	3,455,615
1970	18,633,254	3,287,388	21,920,642	3,183,940	561,740	3,745,680
1971	19,352,162	3,590,850	22,943,012	3,446,063	639,419	4,085,482
1972	18,647,813	3,883,885	22,531,698	3,459,876	720,586	4,180,462
1973	18,671,095	3,976,454	22,647,549	4,034,771	859,301	4,894,072
1974	17,354,017	4,246,505	21,600,522	5,281,137	1,292,265	6,573,402

(1) Total dollar value distributed in proportion to percentage of production onshore and offshore.

Sources: U.S. Total Production and Total Dollar Value at the Wellhead, U.S. Bureau of Mines
U.S. Offshore Production, U.S. Geological Survey
Distribution of production and value computed by the American Petroleum Institute

PRODUCTION AND VALUE OF U.S. NATURAL GAS
ONSHORE - OFFSHORE

Year	PRODUCTION (Millions of Cubic Feet) Onshore	Offshore	Total	DOLLAR VALUE AT WELLHEAD (Thousands of Dollars) Onshore(1)	Offshore(1)	Total
1975	15,943,934	4,164,727	20,108,661	$ 7,092,450	$ 1,852,612	$ 8,945,062
1976	15,637,042	4,315,396	19,952,438	9,069,032	2,502,744	11,571,776
1977	15,528,536	4,496,927	20,025,463	12,272,078	3,553,876	15,825,954
1978	14,839,994	5,134,039	19,974,033	13,430,116	4,616,384	18,076,500
1979	15,026,356	5,444,904	20,471,260	17,699,890	6,413,744	24,113,634
1980	14,996,551	5,382,236	20,378,787	23,586,880	8,465,302	32,052,182
1981	14,631,239	5,546,462	20,177,701	28,969,884	10,981,964	39,951,848
1982	13,053,625	5,466,050	18,519,675	32,075,219	13,421,546	45,496,765
1983	12,087,301	4,734,843	16,822,144	31,358,731	12,255,638	43,614,369
1984	13,009,577	5,220,061	18,229,638	34,560,892	13,843,719	48,404,611
1985	12,566,243	4,631,756	17,197,999	31,566,479	11,616,119	43,182,598
1986	12,202,344	4,588,566	16,790,910	23,705,889	8,901,936	32,607,825

(1) Total dollar value distributed in proportion to percentage of production onshore and offshore

Source: U.S. Energy Information Administration, Natural Gas Annuals
Distribution of production and value computed by the American Petroleum Institute

TOTAL OFFSHORE WELLS DRILLED IN THE UNITED STATES(1)
FEDERAL AND STATE LEASES
Alltime to January 1, 1985

	EXPLORATORY WELLS				DEVELOPMENT WELLS				TOTAL WELLS			
	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total
ALASKA												
State	19	7	54	80	259	13	32	304	278	20	86	384
Federal	1	--	19	20	--	--	--	--	1	--	19	20
Total	20	7	73	100	259	13	32	304	279	20	105	404
CALIFORNIA												
State	20	10	139	169	3152	22	309	3483	3172	32	448	3652
Federal	24	0	155	179	364	3	18	385	388	3	173	564
Total	44	10	294	348	3516	25	327	3868	3560	35	621	4216
OREGON												
Federal	--	--	8	8	--	--	--	--	--	--	8	8
WASHINGTON												
State	--	--	2	2	--	--	--	--	--	--	2	2
Federal	--	--	4	4	--	--	--	--	--	--	4	4
Total	--	--	6	6	--	--	--	--	--	--	6	6
PACIFIC COAST												
Federal	--	--	38	38	--	--	--	--	--	--	38	38
PACIFIC OCEAN												
State	39	17	195	251	3411	35	341	3787	3450	52	536	4038
Federal	25	--	224	249	364	3	18	385	389	3	242	634
Total	64	17	419	500	3775	38	359	4172	3839	55	778	4672
FLORIDA												
State	--	--	15	15	--	--	--	--	--	--	15	15
Federal	--	--	9	9	--	--	--	--	--	--	9	9
Total	--	--	24	24	--	--	--	--	--	--	24	24
LOUISIANA												
State	61	96	920	1077	1851	538	757	3146	1912	634	1677	4223
Federal	206	253	3079	3538	6293	3745	3723	13761	6499	3998	6802	17299
Total	267	349	3999	4615	8144	4283	4480	16907	8411	4632	8479	21522
TEXAS												
State	35	182	700	917	51	145	121	317	86	327	821	1234
Federal	10	91	1032	1133	53	309	579	941	63	400	1611	2074
Total	45	273	1732	2050	104	454	700	1258	149	727	2432	3308

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(1) Offshore wells are defined as those producing from beyond natural shore lines.

Source: American Petroleum Institute

TOTAL OFFSHORE WELLS DRILLED IN THE UNITED STATES(1)
FEDERAL AND STATE LEASES
Alltime to January 1, 1985

	EXPLORATORY WELLS				DEVELOPMENT WELLS				TOTAL WELLS			
	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total
N. GULF OF MEXICO												
Federal	--	--	241	241	69	19	58	146	69	19	299	387
GULF OF MEXICO												
State	96	278	1635	2009	1902	683	878	3463	1998	961	2513	5472
Federal	216	344	4361	4921	6415	4073	4360	14848	6631	4417	8721	19769
Total	312	622	5996	6930	8317	4756	5238	18311	8629	5378	11234	25241
ALABAMA												
State	--	2	--	2	1	1	1	3	1	3	1	5
ATLANTIC OCEAN												
Federal	--	--	36	36	--	--	--	--	--	--	36	36
GRAND TOTAL												
State	135	297	1830	2262	5314	719	1220	7253	5449	1016	3050	9515
Federal	241	344	4621	5206	6779	4076	4378	15233	7020	4420	8999	20439
Total	376	641	6451	7468	12093	4795	5598	22486	12469	5436	12049	29954

(1) Offshore wells are defined as those producing from beyond natural shore lines.

Source: American Petroleum Institute

Section XI
Table 8

ACCUMULATED PRODUCTION STATE AND FEDERAL OFFSHORE LEASES
ALLTIME TO JANUARY 1, 1987

	Oil & Lease Condensate M bbls	Percent of Total	Gas MMCF	Percent of Total
ALASKA				
State	863,190	100	1,320,514	100
Federal	--	--	--	--
CALIFORNIA				
State	1,997,624	84	767,152	76
Federal	368,973	16	242,805	24
Subtotal	2,366,597		1,009,957	
WEST COAST				
State	2,860,814	89	2,087,666	90
Federal	368,973	11	242,805	10
Subtotal	3,229,787		2,330,471	
LOUISIANA				
State	1,414,766	17	10,425,692	13
Federal	7,007,232	83	66,523,817	87
Subtotal	8,421,998		76,949,509	
TEXAS				
State	32,437	18	3,212,424	29
Federal	151,575	82	7,949,386	71
Subtotal	184,011		11,161,810	
GULF OF MEXICO				
State	1,447,203	17	13,638,116	15
Federal	7,158,807	83	74,473,203	85
Subtotal	8,606,010		88,111,319	
TOTAL				
State	4,308,017	36	15,725,782	17
Federal	7,527,780	64	74,716,007	83
GRAND TOTAL	11,835,797		90,441,790	

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 9

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	First Year Rental (Dollars)	Total Bid Per Acre (Dollars)	Average Bid Per Acre (Dollars)
10/13/54	La.	199	748,000	90	394,721	$ 116,378,476	$ 1,184,175	$ 295	$ 1,220
11/09/54	Tex.	38	111,788	19	67,149	23,357,029	201,450	348	2,209
07/12/55	Tex.	39	216,000	27	149,760	8,437,462	449,280	56	177
07/12/55	La.	171	458,095	94	252,807	100,091,263	758,442	396	2,077
07/26/59	Fla.	80	458,000	23	132,480	1,711,872	397,440	13	16
08/11/59	La.	38	81,813	19	38,820	88,035,121	388,200	2,268	10,442
02/26/60	Tex.	97	437,760	48	240,480	35,732,031	721,440	149	1,026
02/26/60	La.	288	1,173,223	99	464,046	246,909,784	1,392,159	532	2,502
03/13/62	La.	401	1,808,276	206	951,811	177,260,305	2,855,433	186	3,201
03/16/62	Tex.	30	90,720	10	28,800	557,720	86,400	19	26
03/16/62	La.	380	1,780,265	195	927,746	267,775,727	2,783,238	289	3,081
10/09/62	La.	19	33,855	9	16,178	43,887,359	161,780	2,713	8,480
05/14/63	Cal.	129	669,777	57	312,945	12,807,587	938,838	41	455
04/28/64	La.	28	34,028	23	32,673	60,340,626	326,780	1,847	10,490
10/01/64	Ore.	149	836,134	74	425,433	27,768,772	1,276,302	65	376
10/01/64	Wash.	47	253,940	27	155,420	7,764,928	466,260	50	310
03/29/66	La.	18	35,993	17	35,056	88,845,963	350,570	2,534	6,112
10/18/66	La.	52	227,898	24	104,717	99,164,930	523,600	947	3,128
12/15/66	Cal.	1	1,995	1	1,995	21,189,000	9,980	10,621	10,621
06/13/67	La.	206	971,489	158	744,456	510,079,178	2,233,458	685	6,500
02/06/68	Cal.	110	540,609	71	363,181	602,719,262	1,089,543	1,660	11,374
05/21/68	Tex.	169	728,551	110	541,304	593,899,046	1,623,915	1,097	7,602
11/19/68	La.	26	46,824	16	29,682	149,868,789	296,820	5,049	27,401
01/14/69	La.	38	96,389	20	48,505	44,037,339	485,050	908	2,161
12/16/69	La.	27	93,764	16	60,153	66,908,196	601,550	1,112	6,600
07/21/70	La.	34	73,360	19	44,642	97,769,013	446,420	2,190	8,201
12/15/70	La.	127	593,485	119	553,898	847,295,760	1,661,694	1,536	12,875
11/04/71	La.	18	55,872	11	37,222	96,304,522	372,230	2,587	18,005
09/12/72	La.	78	366,682	62	290,321	585,827,925	870,996	2,018	21,870
12/19/72	La.	132	604,029	116	535,874	1,665,519,631	1,607,661	3,108	21,630
06/19/73	La.	5	25,000	4	20,000	53,901,709	60,000	2,695	4,892
06/19/73	Tex.	124	672,643	96	527,173	1,537,495,671	1,581,519	2,916	13,491
12/20/73	Ala.	44	248,636	13	74,106	135,834,100	222,318	1,833	7,507
12/20/73	Fla.	85	489,600	62	357,120	1,100,399,131	1,071,360	3,081	36,805
12/20/73	La.	9	27,221	6	19,611	139,130,000	58,839	7,094	20,757
12/20/73	Miss.	9	51,840	6	34,560	115,702,000	103,680	3,348	7,013
03/28/74	La.	206	930,918	91	421,218	2,092,510,854	1,263,675	4,968	33,772
05/29/74	Tex.	245	1,355,678	102	565,112	1,471,851,831	1,695,336	2,605	13,372
07/30/74	La.	115	508,173	9	46,988	7,971,900	140,967	170	1,563
07/30/74	Tex.	143	790,566	10	53,253	22,264,900	159,762	418	1,108
10/16/74	La.	297	1,421,54	144	675,587	1,428,261,330	2,026,812	2,114	39,111
TOTAL		4,451	20,150,435	2,323	10,772,003	14,793,568,042	34,945,372	1,373	

Source: U.S. Department of the Interior, U.S. Geological Survey

Section XI
Table 9a

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

		OFFERED		LEASED					
Date	State	Tracts	Acres	Tracts	Acres	Total Bonus (Dollars)	Total First Year Rental (Dollars)	Average Bid Per Acre (Dollars)	Highest Bid Per Acre (Dollars)
Cumulative totals 1954-1974		4,451	20,150,435	2,323	10,772,003	$14,793,568,042	$34,945,372	$1,373	--
02/04/75	Tex.	515	2,870,344	113	626,585	274,690,955	1,897,761	438	$ 3,566
05/28/75	La.	247	1,153,772	77	355,102	207,064,050	1,065,336	583	5,085
05/28/75	Tex.	36	192,660	9	51,840	25,852,000	155,520	499	1,508
07/29/75	La.	160	762,456	43	206,701	118,360,638	620,106	573	2,732
07/29/75	Tex.	185	1,010,502	23	129,600	44,853,368	388,800	346	1,842
12/11/75	Cal.	231	1,257,593	56	310,049	417,312,141	930,147	1,346	18,260
02/18/76	La.	41	181,610	18	74,823	134,554,317	224,477	1,798	10,678
02/18/76	Tex.	31	155,702	12	63,423	37,382,176	190,270	589	2,126
02/18/76	Fla.	60	350,292	4	23,040	4,040,000	69,120	175	280
04/13/76	Ak.	189	1,008,499	76	409,057	599,836,587	1,226,718	1,369	11,023
08/17/76	MAL(1)	154	876,750	93	529,466	1,127,936,425	1,714,176	2,130	18,933
11/16/76	La.	55	225,660	39	160,819	348,037,718	482,472	2,164	23,606
11/16/76	Tex.	6	28,828	4	17,308	31,111,244	51,924	1,798	4,200
06/23/77	La.	167	867,176	97	454,711	813,991,004	1,364,130	1,790	14,454
06/23/77	Tex.	36	207,360	27	150,723	356,102,428	452,172	2,363	13,520
10/27/77	Ak.	135	768,588	87	495,307	398,471,313	1,603,584	804	13,525
03/28/78	S.Al.	224	1,275,301	43	244,813	100,743,443	792,576	412	1,650
04/25/78	La.	87	392,894	57	262,250	503,820,339	789,770	1,921	11,038
04/25/78	Tex.	58	316,833	33	176,506	229,836,554	526,513	1,300	6,312
10/31/78	Al.	18	103,375	7	40,015	17,353,000	120,045	433	1,302
10/31/78	Fla.	71	408,334	28	161,280	43,823,730	483,840	272	1,422
12/19/78	La.	79	366,427	52	248,020	512,053,605	809,453	2,065	18,778
12/19/78	Tex.	49	277,560	29	164,396	359,411,393	539,635	2,186	12,384
02/28/79	MAL(1)	109	620,557	39	222,038	40,001,631	718,848	180	6,832
06/29/79	Ca.	148	792,845	54	288,260	572,825,418	867,489	1,987	37,280
07/31/79	La.	81	361,747	53	254,497	867,937,556	763,514	3,410	35,963
07/31/79	Tx.	42	215,770	28	136,685	379,551,466	410,056	2,777	33,779
11/27/79	La.	96	433,081	72	320,719	1,653,253,077	962,190	5,155	41,320
11/27/79	Tx.	28	155,520	18	100,800	260,084,860	302,400	2,580	9,323
12/11/79	Ak.	46	172,320	24	85,776	488,691,138	277,808	5,697	43,802
12/18/79	NA(2)	116	660,409	63	358,671	816,516,546	1,161,216	2,277	34,852
09/30/80	La.	192	909,575	116	551,643	2,676,927,673	1,654,962	4,853	52,467
10/21/80	Ak.	210	1,195,569	35	199,261	109,751,073	645,120	551	3,602
11/18/80	Tx.	81	458,308	67	383,323	1,417,961,511	1,149,969	3,699	29,341
TOTAL (1954-1980)		9,358	42,857,357	3,980	19,142,130	30,779,503,142	60,525,536	1,608	

(1) Middle Atlantic
(2) North Atlantic

Source: U.S. Department of the Interior, U.S. Geological Survey, Outer Continental Shelf Statistics

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	Total First Year Rental (Dollars)	Average Bid Per Acre (Dollars)	Highest Bid Per Acre (Dollars)
05/28/81	S.Ca.	111	603,613	60	320,567	2,088,881,824	1,037,904	6,516	65,014
06/30/81(5)	Ak.	175	996,308	1	5,694	170,496	18,432	30	417
07/21/81	GOM(3)	212	1,077,913	156	799,899	2,649,628,752	2,399,736	3,312	37,444
08/04/81	So. Atl.	285	1,622,557	47	267,580	342,766,174	866,304	1,281	18,228
09/29/81	Cook In.	153	858,247	13	73,157	4,405,899	236,856	60	407
10/20/81	GOM	209	1,081,364	102	508,287	1,243,468,752	1,524,903	2,446	53,313
12/08/81	MAL	253	1,440,376	51	290,352	323,659,000	921,600	1,115	7,284
02/09/82	GOM	234	1,219,826	115	590,265	1,193,654,719	1,770,795	2,022	N.A.
06/11/82	So. Ca.	140	716,840	29	147,066	117,875,281	443,913	802	N.A.
08/05/82(4)	Atl,Ca.,Ak.	554	3,142,068	36	204,955	11,149,450	663,552	54	N.A.
10/13/82	Ak.	338	1,825,770	121	662,861	2,055,632,336	2,146,112	3,101	N.A.
11/17/82	GOM	144	732,570	56	281,213	609,178,223	843,657	2,166	N.A.
03/08/83	GOM	125	665,478	11	58,117	37,570,900	174,360	646	N.A.
03/15/83	Ak-NB	418	2,379,751	59	335,898	317,873,372	1,087,488	946	N.A.
04/12/83	Ak-SG	479	2,688,787	96	540,917	426,458,830	1,751,248	788	N.A.
04/26/83	MAL	4,050	22,664,991	37	210,648	68,410,240	681,984	325	N.A.
05/25/83	CGOM	7,050	37,156,426	623	3,089,812	3,367,606,134	9,269,616	1,090	N.A.
07/26/83	SAL	3,582	20,392,985	11	62,625	13,362,040	202,752	213	N.A.
08/24/83	WGOM	5,848	32,620,248	406	2,246,005	1,501,712,517	6,738,015	668	N.A.
11/30/83	S.Ca.	137	768,341	8	43,801	16,022,336	141,808	366	N.A.
01/05/84	EGOM	8,868	50,631,513	156	897,786	310,586,261	2,693,358	346	N.A.
04/17/84	Ak.Nav.	5,036	28,048,995	180	1,024,772	624,491,331	2,784,366	609	N.A.
04/24/84	CGOM	6,502	34,743,780	453	2,278,129	1,323,036,649	6,834,537	581	N.A.
07/18/84	WGOM	5,446	30,038,593	361	1,949,186	844,850,488	5,847,639	433	N.A.
08/22/84	AK-Diap.	1,419	7,773,447	231	1,230,486	871,964,327	3,910,184	709	N.A.
10/17/84	S.Ca.	657	3,147,352	23	114,363	62,121,252	347,157	543	N.A.
05/22/85	CGOM	4,531	24,006,157	409	2,076,907	1,079,377,760	6,230,829	520	N.A.
08/14/85	WGOM	4,879	27,199,074	195	1,075,188	359,175,656	3,225,597	334	N.A.
12/18/85	EGOM	6,344	35,823,478	63	359,948	100,911,298	1,079,844	280	N.A.
04/30/86	CGOM	5,837	31,382,152	101	504,806	130,276,757	1,514,442	258	
08/27/86	WGOM	4,887	27,287,951	41	229,612	56,817,990	688,839	247	
TOTAL (1954-1986)		88,277	478,157,910	8,231	41,627,654	52,932,599,938	128,603,363	N.A.	N.A.

(1) Middle Atlantic
(2) North Atlantic
(3) Gulf of Mexico
(4) Resale

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

U.S. OUTER CONTINENTAL SHELF
REVENUE AND PRODUCTION VALUE
PERCENTAGE CUMULATIVE REVENUE OF CUMULATIVE PRODUCTION VALUE
CALENDAR YEARS
(Thousands of Dollars)

Year All States	Bonuses	Minimum Royalties	Rentals	Shut-in Gas Payments	Royalties	Total Revenue	Total Cumulative Revenue	Total Production Value	Cumulative Production Value
1953	--	--	1,359.6	30.7	967.9	2,358.2	2,358.2	5,036.9	5,036.9
1954	140,969.0	--	3,855.3	87.0	2,749.0	147,660.3	150,018.4	14,370.1	19,407.0
1955	108,528.7	--	3,406.4	122.0	5,140.0	117,197.1	267,215.5	27,060.7	46,467.6
1956	--	--	4,006.2	80.0	7,629.4	11,715.5	278,931.0	39,497.9	85,965.5
1957	--	68.6	3,270.1	110.3	11,391.2	14,840.2	293,771.3	61,072.6	147,038.1
1958	--	184.4	2,420.6	121.2	17,423.9	20,150.1	313,921.3	96,471.1	243,509.2
1959	89,747.0	171.0	2,285.7	85.0	26,540.0	118,828.7	432,750.1	150,472.5	393,981.8
1960	282,717.1	317.0	3,603.1	49.4	37,095.3	323,781.8	756,531.9	200,969.6	594,951.4
1961	--	314.1	3,073.9	37.1	47,920.3	51,345.4	807,877.3	273,636.6	868,587.8
1962	489,481.1	517.7	8,412.2	62.2	66,096.3	564,569.6	1,372,446.9	376,675.9	1,245,263.7
1963	12,807.6	668.3	8,435.2	53.0	76,999.2	98,963.3	1,471,410.2	450,866.5	1,696,130.2
1964	95,874.3	820.3	9,798.6	45.8	88,400.2	194,939.3	1,666,349.4	506,783.5	2,202,913.7
1965	33,740.3	1,072.7	8,731.4	38.5	102,862.5	146,445.4	1,812,794.8	594,222.7	2,797,136.5
1966	209,199.9	1,367.3	6,869.3	41.7	136,987.5	354,465.7	2,167,260.5	801,724.6	3,598,861.1
1967	510,109.7	1,891.5	6,208.9	41.4	157,607.6	675,859.2	2,843,119.7	947,214.7	4,546,075.8
1968	1,346,487.1	2,145.2	8,230.8	52.3	201,136.9	1,558,052.3	4,401,172.0	1,179,912.2	5,725,988.0
1969	111,660.7	1,923.6	8,312.6	41.7	240,090.7	362,029.2	4,763,201.2	1,441,870.5	7,169,858.4
1970	945,064.8	1,745.9	8,607.9	47.7	283,494.6	1,238,960.8	6,002,162.0	1,707,593.5	8,877,451.9
1971	96,304.5	1,891.0	7,742.0	32.3	350,042.5	456,012.3	6,458,174.3	2,135,677.1	11,013,129.0
1972	2,251,347.6	2,019.5	7,984.9	49.6	363,556.3	2,624,957.9	9,083,132.1	2,229,179.1	13,242,308.1
1973	3,082,462.6	2,391.2	8,948.8	52.7	401,126.1	3,494,981.4	12,578,113.6	2,486,864.9	15,729,172.9
1974	5,022,860.8	2,048.4	13,532.8	32.6	560,283.9	5,598,758.4	18,176,872.0	3,570,054.0	19,299,226.9
TOTAL All States	14,829,362.8	21,557.9	139,096.2	1,313.7	3,185,541.5	18,176,872.0	18,176,872.0	19,299,226.9	19,299,226.9

NOTE: Revenue = charges and/or collection--bonuses and first year rentals adjusted from book transfer dates (years) to Geological Survey from Bureau of Land Management, to actual sales dates. Distribution of escrow funds totaling $39,316,545 to the State of Louisiana and Lessees, pursuant to Supreme Court decree dated December 31, 1965, was not deducted from calendar year 1966 revenue charges, nor was the production value of $157 million deducted.
1970 bonuses increased $951,875 and rentals increased $22,500--leases on appeal validated.

Source: U.S. Department of Interior, U.S. Geological Survey, Outer Continental Shelf Statistics, June 1975

Section XI
Table 10a

U.S. OUTER CONTINENTAL SHELF
REVENUE AND PRODUCTION VALUE
PERCENTAGE CUMULATIVE REVENUE OF CUMULATIVE PRODUCTION VALUE
CALENDAR YEARS
(In Thousands of Dollars)

Year All States	Bonuses	Minimum Royalties	Rentals	Shut-in Gas Payments	Royalties	Total Revenue	Total Cumulative Revenue	Total Production Value	Total Cumulative Production Value
Cumulative 1953-1974	$14,829,362.8	$21,557.9	$139,096.2	$1,313.7	$3,185,541.5	$18,176,872.0	$18,176,872.0	$19,299,226.9	$19,299,226.9
1975	1,088,133.2	2,085.9	17,522.0	39.5	594,725.5	1,723,325.1	19,900,196.9	3,924,914.9	23,224,141.8
1976	2,242,898.5	2,128.3	23,370.5	38.4	660,392.7	2,967,860.5	22,868,057.4	4,402,440.0	27,626,581.8
1977	1,568,564.7	1,679.0	19,830.0	21.1	890,469.8	2,509,742.3	25,377,799.7	5,744,056.4	33,400,638.3
1978	1,767,042.1	2,207.2	21,512.7	4.0	1,139,198.2	2,941,111.9	28,318,911.6	7,096,500.1	40,497,138.3
1979	5,078,861.7	2,038.5	20,287.3	6.6	1,512,017.2	6,616,592.1	34,935,503.7	9,273,278.3	49,770,416.6
1980	4,204,640.3	2,291.4	19,062.5	--	2,132,528.7	6,362,657.6	41,298,161.3	13,055,515.8	62,825,932.5
1981	6,652,980.9	2,250.3	21,731.0	--	3,287,279.4	9,965,512.5	51,263,673.7	20,199,823.2	83,025,755.7
1982	3,987,490.0	2,393.8	20,055.2	--	3,814,871.6	7,824,810.6	59,088,484.3	22,573,099.1	105,598,854.8
1983	5,749,016.4	4,463.7	32,463.1	--	3,454,318.1	9,240,261.2	68,328,745.5	21,540,887.5	127,139,742.3
1984	4,037,050.3	3,458.1	35,607.8	--	3,914,724.6	8,040,297.0	76,369,042.5	24,001,446.1	151,141,188.4
1985	1,539,464.7	4,067.3	61,814.6	--	3,612,782.8	5,244,160.0	81,613,202.5	22,153,297.0	173,294,685.5
1986	187,094.7	5,176.6	52,958.2	--	2,533,376.7	2,804,890.2	84,711,161.6	15,711,161.6	189,005,847.0
TOTAL ALL STATES:	52,932,599.9	55,847.9	485,311.2	1,423.3	30,663,838.2	84,418,092.7	81,559,305.0	189,005,847.0	189,005,847.0

Source: U.S. Department of the Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 11

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE	TOTAL AMOUNT OF ALL BIDS RECEIVED	TOTAL BONUS
10/13/54	LA.	$ 302,924,834	$ 116,378,476
11/9/54	TEX.	73,801,896	23,357,029
TOTAL		376,726,730	139,735,505
7/12/55	TEX.	9,027,610	8,437,462
7/12/55	LA.	314,212,441	100,091,264
TOTAL		323,240,051	108,528,726
5/26/59	FLA.	1,711,872	1,711,872
8/11/59	LA.	174,411,628	88,035,120
TOTAL		176,123,500	89,746,992
2/24/60	TEX.	56,400,897	35,732,031
2/24/60	LA.	518,774,752	246,909,784
TOTAL		575,175,649	282,641,815
3/13/62	LA.	314,218,540	177,260,305
3/16/62	TEX.	557,720	557,720
3/16/62	LA.	604,799,998	267,775,677
10/9/62	LA.	66,265,290	43,887,359
TOTAL		985,841,548	489,481,061
5/14/63	CAL.	13,989,953	12,807,587
4/28/64	LA.	93,850,051	60,340,626
10/1/64	ORE.	43,049,543	27,768,772
10/1/64	WASH.	10,530,210	7,764,928
TOTAL		147,429,804	95,874,326
3/29/66	LA.	275,384,739	88,845,963
10/18/66	LA.	185,214,816	99,164,930
12/15/66	CAL.	89,937,020	21,189,000
TOTAL		550,536,575	209,199,893
6/13/67	LA.	1,627,749,269	510,079,178
2/6/68	CAL.	1,293,601,113	602,719,262
5/21/68	TEX.	1,620,393,212	593,899,046
11/19/68	LA.	398,430,736	149,868,789
TOTAL		3,312,425,061	1,346,487,097
1/14/69	LA.	71,036,938	44,037,339
12/16/69	LA.	230,460,743	66,908,196
TOTAL		301,497,681	110,945,535

Source: U.S. Department of the Interior, Bureau of Land Management

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
7/21/70	LA.	$ 163,451,158	$ 97,769,013
12/15/70	LA.	2,877,429,559	846,784,660
TOTAL		3,040,880,717	944,553,673
11/4/71	LA.	172,735,981	96,304,523
9/12/72	LA.	1,599,155,464	585,827,925
12/19/72	LA.	6,191,018,227	1,665,519,631
TOTAL		7,962,909,672	2,347,652,057
6/19/73	TEX.-LA.	6,248,160,989	1,591,397,380
12/20/73	MISS., LA.,FLA	3,404,892,969	1,491,065,231
TOTAL		9,653,053,958	3,082,462,611
3/28/74	LA.	6,474,003,574	2,092,510,854
5/29/74	TEX.	3,354,292,556	1,471,851,831
7/30/74	LA.-TEX.	88,799,354	30,236,800
10/16/74	LA.	2,514,518,419	1,427,242,455
10/16/74	LA.ROYALTY	7,238,500	1,018,875
TOTAL		12,438,852,403	5,022,860,815
2/04/75	Texas	$ 484,721,874	$ 274,690,955
5/28/75	La.-Tex.	402,752,335	232,916,050
7/29/75	La.-Tex.	317,001,333	163,214,006
12/11/75	S. Cal.	901,960,364	417,312,141
TOTAL		2,106,435,906	1,088,133,152
2/18/76	FL., LA., TX.	428,003,629	175,976,493
4/13/76	Alaska	1,732,170,868	559,836,587
8/17/76	MAL(1)	3,153,411,802	1,127,936,425
11/16/76	La.-Tx.	833,015,950	379,148,962
TOTAL		6,146,602,249	2,242,898,467
6/23/77	La.-Tx.	2,928,091,214	1,170,093,432
10/27/77	Alaska	643,559,393	388,488,081
	(Royalty)	33,516,288	9,983,232
TOTAL		3,605,166,895	1,568,564,745
3/28/78	S. Al	150,927,700	100,743,443
4/25/78	La.-Tx.	1,559,345,259	733,656,893
10/31/78	Al, Fla., Ms.	87,592,568	61 176,730
12/19/78	La.-Tx.	2,355,263,307	871,464,998
TOTAL		4,153,128,834	1,767,042,064

(1) Middle Atlantic

Source: U.S. Department of the Interior, Minerals Management Service.

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
2/28/79	MAL(1)	$ 66,005,881	$ 40,001,631
6/29/79	Ca.	994,683,700	572,825,418
7/31/79	La.-Tx.	3,333,990,620	1,247,489,022
11/27/79	La.-Tx.	4,683,195,907	1,913,337,938
12/11/79	Ak.	945,445,102	488,691,138
12/18/79	NA(2)	1,270,789,889	816,516,546
TOTAL		11,294,111,099	5,078,861,693
9/30/80	La.	7,109,464,692	2,676,927,673
10/21/80	Ak.	197,417,470	109,751,073
11/18/80	Tx.	3,500,570,271	1,417,961,511
TOTAL		10,807,452,033	4,204,640,257
5/28/81	Ca.	4,885,810,689	2,038,566,639
6/30/81(6)	Ak.	5,582,362	170,496
7/21/81	GOM(4)	5,227,548,535	2,649,628,752
8/04/81	So. Atl.	561,050,365	342,766,174
9/29/81	Co. In.	4,697,309	4,405,899
10/20/81	GOM(4)	2,402,400,552	1,243,468,752
12/08/81	MAL	578,952,000	323,659,000
TOTAL		13,666,041,812	6,602,665,712
2/09/82	GOM	2,683,699,843	1,193,654,719
6/11/82	Ca.	210,486,278	117,875,281
8/05/82	Atl.,Ca.,Ak.	14,439,195	11,149,450
10/13/82	Ak.	4,589,972,518	2,055,632,336
11/17/82	GOM	1,185,091,610	609,178,223
TOTAL		8,683,689,444	3,987,490,009
3/08/83	GOM	48,755,129	37,570,900
3/15/83	Ak.	371,803,984	317,873,372
4/12/83	Ak.	547,731,283	426,458,830
4/26/83	MAL	86,822,680	68,410,240
5/25/83	GOM	4,582,847,288	3,367,606,134
7/26/83	SAL	14,562,040	13,362,040
8/24/83	GOM	2,350,359,669	1,501,712,517
11/30/83	C.Ca.	24,045,646	16,022,336
TOTAL		8,026,927,719	5,749,016,369
1/05/84	EGOM	500,261,361	310,586,261
4/17/84	Ak.Nav.	1,148,701,653	624,491,331
4/24/84	CGOM	2,126,776,904	1,323,036,649
7/18/84	WGOM	1,263,576,675	844,850,488
8/22/84	Ak-Diap.	1,365,968,674	871,964,327
10/17/84	S. Ca.	73,163,686	62,121,252
TOTAL		6,478,448,953	4,037,050,308

(1) Middle Atlantic
(2) North Atlantic
(4) Gulf of Mexico
(6) RESALE

Source: U.S. Department of the Interior, Minerals Management Service.

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
05/22/85	CGOM	$ 1,566,926,725	$ 1,079,377,760
08/14/85	WGOM	519,116,036	359,175,656
12/18/85	EGOM	155,241,798	100,911,298
TOTAL		2,241,284,559	1,539,464,714
04/30/86	CGOM	164,135,937	130,276,757
08/27/88	WGOM	69,498,490	56,817,990
TOTAL		233,634,427	187,094,747

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

ANNUAL INSTALLATIONS AND REMOVALS OF OFFSHORE PRODUCTION PLATFORMS IN FEDERAL WATERS
as of December 31, 1986

	ALASKA OCS*		ATLANTIC OCS*		GOM OCS		PACIFIC OCS		
Year	Installations	Removals	Installations	Removals	Installations	Removals	Installations	Removals	Year's Net Platform Additions
1953-60	0	0	0	0	474	7	0	0	467
1961	0	0	0	0	111	0	0	0	111
1962	0	0	0	0	123	0	0	0	123
1963	0	0	0	0	86	2	0	0	84
1964	0	0	0	0	130	0	0	0	130
1965	0	0	0	0	126	5	0	0	121
1966	0	0	0	0	116	2	0	0	114
1967	0	0	0	0	134	0	1	0	135
1968	0	0	0	0	107	1	3	0	109
1969	0	0	0	0	105	1	1	0	105
1970	0	0	0	0	124	1	0	0	123
1971	0	0	0	0	101	4	0	0	97
1972	0	0	0	0	121	6	0	0	115
1973	0	0	0	0	98	1	0	0	97
1974	0	0	0	0	52	18	0	0	34
1975	0	0	0	0	100	32	0	0	68
1976	0	0	0	0	111	31	1	0	81
1977	0	0	0	0	116	15	1	0	102
1978	0	0	0	0	164	25	0	0	139
1979	0	0	0	0	159	43	2	0	118
1980	0	0	0	0	169	32	3	0	140
1981	0	0	0	0	171	24	2	0	149
1982	0	0	0	0	192	21	0	0	171
1983	0	0	0	0	179	36	1	0	144
1984	0	0	0	0	224	47	1	0	178
1985	0	0	0	0	199	68	3	0	134
1986	0	0	0	0	97	33	1	0	65
TOTAL	0	0	0	0	3,889	455	20	0	3,454

* There is no production in the Federal Waters offshore of Alaska or on the Atlantic OCS.

NOTE: Gulf of Mexico OCS platform data includes accounting adjustments for 1983, 1984, and 1985. The 1983 removal figures reflect earlier transfers of 5 Federal wells from Federal to State jurisdiction and the conversion of 3 from production to service use. The 1985 installation total includes 47 platforms counted during audits completed in 1985.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

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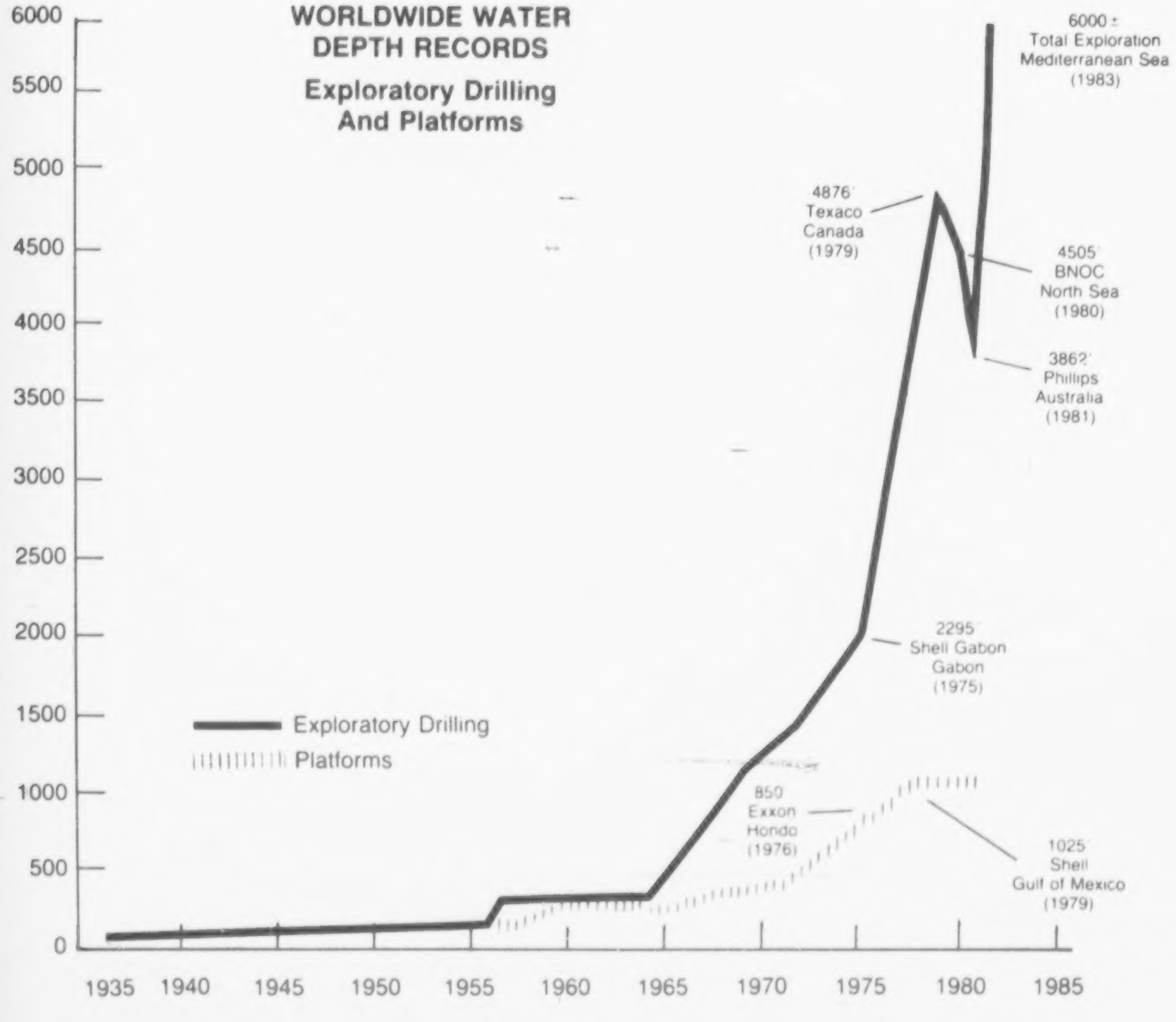
Table 13



SOURCE: Offshore Magazine June 20 1982

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Table 14

BLOWOUTS AND SPILLAGE FROM FEDERAL OFFSHORE OIL WELLS COMPARED TO ANNUAL PRODUCTION ON THE OCS, 1971-1986

	No. of Well	Drilling Blowouts				Nondrilling Blowouts						Total No. of	Spills in	Production in
		Exploration		Development		Production		Workover		Completion				
Year	Starts	No.	Bbl	No.	Bbl	No.	Bbl	No.	Bbl	No.	Bbl	Blowouts	Barrels	MMbbls.
1971	864	2	2	0	0	2	450	1	0	0	0	5	450	418.5
1972	856	2	0	1	0	0	0	0	0	0	0	3	0	411.9
1973	829	2	0	1	0	0	0	0	0	0	0	3	0	394.7
1974	801	0	0	1	0	2	75	1	200	0	0	4	275	360.6
1975	841	4	0	0	0	0	0	1	0	1	0	6	0	330.2
1976	1,086	1	0	4	0	1	0	0	0	0	0	6	0	316.9
1977	1,220	2	0	2	0	0	0	3	0	2	0	9	0	303.9
1978	1,139	4	0	5	0	0	0	2	0	1	0	12	0	292.3
1979	1,109	3	0	2	0	0	0	0	0	0	0	5	0	285.6
1980	1,079	3	0	1	0	1	1	2	0	1	0	8	1	277.4
1981	1,109	2	0	1	0	0	0	2	64	5	0	10	64	289.8
1982	1,159	0	0	4	0	0	0	3	0	1	0	8	0	321.2
1983	1,066	3	0	4	0	0	0	1	0	1	0	9	0	348.3
1984	1,136	3	0	2	10	0	0	1	0	0	0	6	10	370.2
1985	1,040	2	0	0	0	1	40	1	0	0	0	4	40	389.3
1986	588	1	0	0	0	0	0	1	0	0	0	2	0	389.2
TOTAL	15,922	34	0	28	10	7	566	19	264	12	0	100	840	5,500.0

Note: Only crude oil and condensate blowout spillage is given here, in barrels for the 100 blowouts that occurred during the past 16 years. Production totals are given in millions of barrels (MMbbl). Information on other than oil and condensate spills may be obtained from the Chief, Offshore Rules and Operations Division, MMS, Reston, Virginia 22091.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

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Table 15

CRUDE AND CONDENSATE SPILLS OF ONE BARREL OR MORE IN FEDERAL WATERS
1970-1986

Year	Gulf of Mexico: No. Spills	Gulf of Mexico: Bbls. Spilled	Pacific: No. Spills	* Pacific Bbls. Spilled
1970	7	83,823	0	--
1971	10	1,110	0	--
1972	2	181	0	10,325
1973	3	21,935	0	1,825
1974	8	23,973	0	1,460
1975	0	0	0	1,460
1976	60	4,740	0	1,458
1977	60	919	0	1,458
1978	62	1,382	0	1,456
1979	94	536	0	1,456
1980	42	1,775	1	1,458
1981	50	5,503	6	1,488
1982	42	124	3	1,464
1983	59	520	3	916
1984	47	224	5	770
1985	38	581	3	374
1986	37	227	2	376

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* This column shows estimated seepage from the Santa Barbara blowout of January 28, 1969. Seepage following the blowout has been variously estimated at 10,000 to 71,500 barrels, but totals above do not include the first 10 days. The figure for 1972 includes seepage between February 7, 1969 and December 31, 1972.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

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Table 16

HISTORICAL DATA ON LEASING
CONTINENTAL SEABEDS ADJACENT TO THE UNITED STATES
(THOUSANDS OF SQUARE STATUTE MILES)

Region	State Lands(1)	OCS "Shelf" (Between State Limit and 200 Meter Depth)	Continental Slope (Between 200 and 2500 Meter Depths)	Total OCS
Hawaii	--	0.4(2)	3.6	4.0
Alaska	22.9	560.0	212.2	795.1
Pacific Coast States	4.5	15.0	76.2	95.7
Gulf Coast States	13.5	121.0	84.2	218.7
Atlantic Coast States	7.1	129.1	102.5	238.7
Total	48.0	825.5	478.7	1,352.2
		559,040,000Ac.	306,368,000 Ac.	865,408,000 Ac.

		Percent of OCS "Shelf"	Percent of Total OCS
TOTAL FEDERAL OCS ACREAGE EVER OFFERED FOR LEASE THROUGH 8/22/84	329,472,769	58.9	38.1
TOTAL FEDERAL OCS LEASED THROUGH 8/22/84	37,147,323	6.6	4.3
TOTAL FEDERAL OCS CURRENTLY UNDER LEASE 12/31/83(3)	18,500,000	3.3	2.1

(1) Areas within three nautical miles of coastline, except for Texas and Gulf Coast of Florida where the boundaries are three leagues (nine nautical miles) distant.
(2) Includes state areas.
(3) Approximate acreage figure is used because of constant company relinquishments of leases--approximately 200 leases relinquished each year.

Source: Public Land Law Review Commission
"All Sales" Statistics Compiled by Bureau of Land Management, New Orleans Office, August 1981

FEDERAL OFFSHORE PLANNING AREAS RANKED BY MARCH 1986 REVISED CONDITIONAL MEAN ESTIMATES OF UNDISCOVERED, ECONOMICALLY RECOVERABLE RESOURCES

	Ranking of OCS Areas	Estimated Acres in Millions	Marg. Prob. of H*	Oil in Barrels	Gas in Tcf	Risked Estimates in Bbls of Oil Equiv.
1.	Central Gulf of Mexico	46	1.00	3.75	30.69	9.18
2.	Western Gulf of Mexico	35	1.00	1.90	26.76	6.66
3.	Southern California	30	1.00	1.54	2.42	1.97
4.	Navarin Basin, AK	37	0.27	4.80	5.84	1.58
5.	Mid-Atlantic	82	1.00	0.36	5.98	1.42
6.	St. George Basin, AK	70	0.22	1.69	15.76	0.99
7.	South Atlantic	99	0.25	0.86	16.18	0.94
8.	Beaufort Sea, AK	52	0.70	1.28	5.62	0.89
9.	Eastern Gulf of Mexico	58	1.00	0.41	2.19	0.80
10.	Chukchi Sea, AK	29	0.20	2.68	15.10	0.54
11.	Central California	15	0.65	0.56	0.79	0.46
12.	Northern California	29	0.60	0.42	1.86	0.45
13.	North Atlantic	49	0.30	0.26	5.06	0.35
14.	Norton Basin, AK	25	0.15	0.64	2.94	0.17
15.	N. Aleutian Basin, AK	32	0.20	0.36	2.62	0.17
16.	Gulf of Alaska	133	0.08	0.54	8.34	0.16
17.	Oregon/Washington	47	0.20	0.18	3.26	0.15
18.	Kodiak, AK	89	0.05	0.15	2.92	0.03
19.	Florida Straits	8	0.11	0.04	1.04	0.02
20.	Cook Inlet, AK	5	0.03	0.21	0.35	0.01
21.	Hope Basin, AK	12	0.02	0.17	1.81	0.01
22.	Shumagin, AK	83	0.03	0.05	1.42	0.01
23.	Aleutian Arc, AK	54	neg.	neg.	neg.	neg.
24.	Aleutian Basin, AK	160	neg.	neg.	neg.	neg.
25.	Bowers Basin, AK	86	neg.	neg.	neg.	neg.
26.	St. Matthew-Hall, AK	51	neg.	neg.	neg.	neg.

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* Marginal probability of hydrocarbons (H), given here as a decimal fraction of 1.00 as the certainty, expresses the chance of occurrence of oil and gas in commercial volumes, using existing technology and under current economic conditions.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

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Table 18

U.S. OFFSHORE CRUDE OIL PRODUCTION BY STATE
(Thousands of Barrels)

	Alaska		California		Louisiana		Texas		Total U.S.	
Year	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal
1965	31.9	0	42,772.0	0	53,253.0	144,964.9	553.0	3.7	96,609.9	144,968.6
1966	2,652.7	0	53,294.0	0	56,697.4	187,831.5	367.6	882.6	113,011.7	188,714.1
1967	15,933.0	0	64,807.0	0	65,040.2	218,995.8	280.1	2,865.8	146,060.3	221,861.6
1968	52,524.6	0	83,279.0	2,059.9	66,648.9	263,825.4	536.0	3,110.6	202,988.5	268,995.9
1969	60,887.0	0	89,061.0	9,940.8	67,250.7	300,159.3	223.7	2,759.9	217,422.4	312,860.0
1970	70,472.0	0	79,504.2	24,987.6	72,063.2	333,411.5	779.5	2,247.0	222,818.9	360,646.2
1971	66,793.3	0	70,819.0	31,103.5	69,061.4	385,760.4	474.0	1,685.0	207,147.7	418,548.9
1972	64,336.6	0	73,168.5	22,562.2	71,184.6	387,590.7	739.8	1,733.0	209,429.4	411,885.9
1973	62,427.3	0	70,582.6	18,915.3	54,957.7	374,196.9	667.6	1,617.8	188,635.1	394,730.0
1974	60,630.2	0	67,206.8	16,776.7	46,688.6	342,435.5	578.1	1,381.8	175,103.7	360,594.1
1975	60,709.2	0	64,274.0	15,304.8	40,962.3	313,592.6	353.8	1,340.1	166,299.3	330,237.5
1976	55,190.9	0	56,646.1	13,978.6	38,358.2	301,887.0	708.5	1,054.6	150,903.6	316,920.1
1977	50,575.7	0	48,223.9	12,267.6	33,804.7	290,771.6	2,620.3	909.0	135,224.6	303,948.2
1978	45,712.5	0	43,524.6	12,085.9	32,365.5	278,071.5	2,457.6	2,107.6	124,060.2	292,265.0
1979	38,922.7	0	42,202.6	10,961.1	29,359.9	271,008.9	2,544.1	3,595.5	113,029.3	285,565.5
1980	32,726.5	0	39,978.9	10,198.9	27,591.9	256,688.1	1,962.6	10,502.0	102,259.9	277,389.0
1981	28,447.1	0	39,164.7	19,605.0	26,219.7	255,875.7	1,823.8	14,284.7	95,655.2	289,765.4
1982	24,680.9	0	39,810.6	28,434.2	24,825.6	275,513.5	1,754.3	17,263.8	91,071.4	321,211.5
1983	21,911.9	0	30,527.5	68,230.1	24,314.5	298,093.6	2,286.5	19,710.2	86,215.5	348,331.2
1984	19,631.0	0	39,508.3	30,254.3	26,852.7	318,024.6	2,100.6	21,960.1	88,092.8	370,239.0
1985	12,644.2	0	39,588.8	29,781.5	23,747.8	338,901.9	2,175.6	20,641.0	78,156.5	389,324.3
1986	15,349.2	0	34,697.5	29,227.8	25,719.9	340,152.3	2,091.5	19,835.9	77,858.1	389,216.0

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics, 1986.

U.S. OFFSHORE DRY NATURAL GAS PRODUCTION BY STATE(1)
(Millions of Cubic Feet)

Year	Alaska		California		Louisiana		Texas		Total U.S.	
	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal
1965	10.9	0	40,770.0	0	217,148.0	645,589.5	27,520.0	0	285,449.0	645,589.5
1966	1,200.1	0	46,839.0	0	282,848.8	965,387.8	21,623.0	42,059.4	352,510.9	1,007,447.2
1967	9,046.3	0	46,732.0	0	395,359.1	1,087,262.8	60,844.6	99,952.9	511,981.9	1,187,215.8
1968	25,806.8	0	85,765.0	799.7	493,015.1	1,413,467.6	190,778.3	109,910.8	795,365.1	1,524,178.1
1969	43,243.5	0	79,058.0	4,845.9	557,680.7	1,822,544.1	110,959.5	127,097.0	790,941.7	1,954,487.0
1970	83,139.5	0	58,892.2	12,229.1	595,318.6	2,273,147.0	131,360.8	133,300.4	868,711.1	2,418,676.6
1971	86,326.3	0	45,776.3	15,671.5	573,451.1	2,634,014.0	108,242.1	127,357.9	813,806.1	2,777,043.4
1972	76,818.6	0	34,747.1	10,033.6	603,638.1	2,881,364.7	130,126.0	147,156.5	845,329.9	3,038,554.8
1973	74,655.1	0	30,596.3	7,286.5	557,250.2	3,055,628.2	102,364.3	148,673.6	764,866.0	3,211,588.4
1974	74,672.5	0	28,931.1	5,573.6	518,580.6	3,349,170.9	109,597.3	159,979.4	731,781.5	3,514,723.9
1975	76,294.5	0	23,320.0	3,951.6	508,462.0	3,332,160.1	97,957.2	122,572.8	706,133.8	3,458,693.5
1976	74,142.8	0	18,983.9	3,475.2	512,934.9	3,499,865.9	113,411.0	92,582.4	719,472.6	3,595,923.5
1977	77,539.5	0	14,237.2	3,290.0	486,096.2	3,647,513.7	181,306.7	86,943.3	759,179.6	3,737,746.9
1978	74,910.5	0	14,196.1	3,472.3	489,728.7	4,149,731.1	170,142.6	231,857.5	748,977.9	4,385,060.9
1979	73,792.4	0	13,550.3	2,866.8	476,965.2	4,158,521.7	207,617.3	511,590.6	771,925.2	4,672,979.1
1980	64,543.2	0	13,074.7	3,107.0	408,784.2	4,013,707.4	254,377.2	624,642.5	740,779.3	4,641,457.0
1981	72,307.3	0	13,470.7	12,766.3	374,439.8	4,106,494.6	236,707.2	730,275.8	696,924.9	4,849,536.7
1982	68,372.5	0	14,007.2	17,750.9	359,349.3	3,803,740.1	246,966.9	858,020.3	688,715.9	4,679,511.3
1983	68,836.8	0	13,853.3	16,024.3	316,254.0	3,173,892.4	148,134.3	850,817.2	547,073.3	4,040,733.9
1984	68,688.2	0	13,836.6	27,806.9	313,362.3	3,578,740.6	112,090.6	931,293.6	507,977.7	4,537,841.1
1985	62,796.0	0	19,483.1	49,164.2	229,971.7	3,116,884.5	108,130.7	834,926.5	420.381.5	4,000,975.2
1986	63,351.0	0	18,252.9	42,689.0	228,128.9	2,927,832.3	115,126.3	978,370.6	424,859.1	3,948,891.8

(1) Includes casinghead gas.

Source: U.S. Department of Interior, Mineral Management Service, Federal Offshore Statistics, 1986.

SECTION XII. TRANSPORTATION

Table 1. U.S. Gas Utility Industry Miles of Pipeline and Main by Type

Table 2. Total Crude Oil and Petroleum Products Transportated in U.S. by Method of Transportation

Table 3. U.S. Tank Ship Fleet (Actual and T2-SE-A1 Equivalents)

Table 4. World Tank Ship Fleet (Actual and T2-SE-A1 Equivalents)

Table 5. Age Distribution of World Tanker Fleet by Major Flag of Registry

Table 6. Spills of Oil and Other Substances

Table 7. Total and Average Consumption of Motor Fuel by U.S. Motor Vehicles

Table 8. Total and Average Travel by U.S. Motor Vehicles

Table 9. U.S. Car Sales by Market-Class Comparisons

Table 10. Mileage and Deliveries for U.S. Liquid Pipelines

Table 11. Mileage and Compressor Stations for U.S. Natural Gas Pipelines

Section XII
Table 1

U.S. GAS UTILITY INDUSTRY
MILES OF PIPELINE AND MAIN, BY TYPE(1)
(Thousands)

Year	Field and Gathering	Transmission Pipeline	Distribution Main	Total
1947	27.1	92.9	211.5	331.4
1948	29.2	97.0	220.1	346.4
1949	30.9	102.9	230.3	364.1
1950	32.9	113.1	241.6	387.5
1951	34.7	120.5	252.5	407.7
1952	38.4	123.4	263.5	425.3
1953	41.5	130.4	274.5	446.4
1954	43.8	139.0	287.7	470.5
1955	45.7	145.9	305.1	496.7
1956	47.6	153.8	323.8	525.2
1957	50.0	160.1	338.7	548.8
1958	52.0	165.4	354.1	571.5
1959(2)	54.1	174.3	371.4	599.8
1960(3)	55.8	183.7	391.4	630.9
1961	56.7	191.9	410.4	659.0
1962	58.7	196.4	428.1	683.2
1963	60.7	200.9	448.3	709.9
1964	61.0	205.4	469.8	736.2
1965	61.7	211.3	494.5	767.5
1966	63.0	217.0	519.6	799.6
1967	63.7	225.4	539.2	828.3
1968	64.4	234.5	562.7	861.6
1969	64.9	248.1	578.6	891.6
1970	66.3	252.2	594.8	913.3
1971	66.2	254.8	610.4	931.4
1972	66.9	258.1	623.1	948.1
1973	65.9	263.1	633.8	962.9
1974	66.4	262.2	645.6	974.1
1975	68.5	262.6	648.2	979.3
1976	70.3	258.2	659.1	987.7
1977	71.5	260.5	666.9	998.9
1978	74.9	260.6	677.5	1,013.0
1979	77.8	263.5	688.5	1,029.8
1980	83.5	266.5	701.8	1,051.8
1981	86.2	269.5	714.1	1,069.8
1982	90.5	271.7	721.2	1,083.4
1983	91.9	273.5	729.7	1,095.1
1984	93.7	271.9	736.8	1,102.4

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(1) Excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of the end of each year.
(2) These figures and those for subsequent years include Hawaii.
(3) These figures and those for subsequent years include Alaska.

SOURCE: American Gas Association, Gas Facts

U.S. GAS UTILITY INDUSTRY
MILES OF PIPELINE AND MAIN, BY TYPE(1)
(Thousands)

Year	Field and Gathering	Transmission Pipeline	Distribution Main	Total
1985	94.1	271.2	753.4	1,118.7
1986	93.8	271.0	769.3	1,134.1
1987	95.5	271.9	783.8	1,151.2

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(1) Excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of the end of each year.

Source: American Gas Association, Gas Facts, Annual.

Section XII
Table 2

TOTAL CRUDE OIL AND PETROLEUM PRODUCTS TRANSPORTED IN THE U.S. BY METHOD OF TRANSPORTATION

(In Billions of Ton Miles)

	Pipelines		Water Carriers		Motor Carriers (1)		Railroads		
Year	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Total Crude and Products Ton Miles
1972	475.8	56.73	330.0	39.34	23.0	2.74	10.0	1.19	838.8
1973	507.0	60.10	296.8	35.18	25.0	2.96	14.8	1.76	843.6
1974	506.0	59.69	297.0	35.04	29.0	3.42	15.7	1.85	847.7
1975	507.0	59.88	298.0	35.02	27.6	3.26	14.1	1.66	846.7
1976	515.0	59.35	306.9	35.37	32.5	3.75	13.3	1.53	867.7
1977	546.0	59.13	333.3	36.09	29.6	3.21	14.5	1.57	923.4
1978	585.8	50.49	530.6	45.73	30.6	2.64	13.2	1.14	1,160.2
1979	608.3	51.78	522.9	44.51	30.1	2.56	13.5	1.15	1,174.8
1980	588.2	47.24	617.9	49.61	26.8	2.15	12.5	1.00	1,245.3
1981	563.7	46.27	617.2	50.66	24.9	2.04	12.6	1.03	1,218.4
1982	565.7	46.44	616.9	50.64	22.7	1.86	12.9	1.06	1,218.2
1983	556.1	45.45	630.5	51.53	25.1	2.05	11.8	0.97	1,223.5
1984	568.1	48.14	570.7	48.36	29.2	2.47	12.2	1.03	1,180.2
1985	564.3	47.20	590.4	49.39	28.7	2.40	12.1	1.01	1,195.3
1986	577.9	48.65	568.1	47.83	29.7	2.50	12.1	1.02	1,187.8

(1) Estimate.

Source: Association of Oil Pipelines, Shifts in Petroleum Transportation, 1988.

Section XII
Table 3

U.S. TANK SHIP FLEET (ACTUAL AND T2-SE-A1 EQUIVALENTS)
(Ocean-going vessels of 2,000 gross tons and over)

Year (1)	ACTUAL FLEET Number	Gross Tons	Deadweight Tons	Average Speed (knots)	T2-SE-A1 Equivalents
Jan. 1, 1947	951	8,784,894	14,035,000	13.86	800.5
Oct. 1, 1947	744	6,995,223	11,171,400	14.07	646.4
April 1, 1948	621	5,878,786	9,395,500	14.0	541.9
Jan. 1, 1949	593	5,656,497	9,016,200	14.1	524.2
Sept. 1, 1949	578	5,439,009	8,639,800	14.4	513.2
Sept. 1, 1950	559	5,322,698	8,460,700	14.5	505.1
April 1, 1951	560	5,363,699	8,520,800	14.6	510.0
Oct. 1, 1952	550	5,284,400	8,446,400	14.6	508.3
1953	550	5,475,800	8,639,800	14.8	525.3
1954	525	5,376,500	8,446,200	15.0	521.7
1955	490	5,094,900	7,989,500	15.1	497.4
1956	477	5,040,700	7,892,700	15.2	493.4
1957	470	5,097,400	7,959,900	15.4	503.1
1958	474	5,316,100	8,309,200	15.5	529.5
1959	485	5,593,600	8,766,300	15.6	563.0
1960	478	5,664,000	8,894,600	15.7	575.0
1961	469	5,751,400	9,085,300	15.8	590.1
1962	456	5,726,900	9,045,300	15.9	589.8
1963	440	5,631,000	8,912,600	15.9	583.5
1964	422	5,553,400	8,816,300	16.0	579.3
1965	410	5,479,800	8,733,500	16.0	575.8
1966	387	5,343,700	8,549,900	16.1	566.3
1967	382	5,322,800	8,550,700	16.1	566.4
1968	380	5,337,300	8,655,700	16.1	574.6
1969	365	5,319,400	8,797,900	16.1	584.9
1970	350	5,305,800	8,911,000	16.2	593.4
1971	347	5,453,100	9,218,200	16.3	616.5
1972	328	5,411,300	9,253,300	16.4	621.0
1973	312	5,507,000	9,525,200	16.3	640.3
1974	306	5,798,068	10,236,221	16.4	790.0
1975	293	5,943,289	10,601,370	16.4	714.5
1976	290	6,357,974	11,565,138	16.4	779.3
1977	254	6,486,000	11,950,200	16.0	N.A.
1978	271	7,449,900	13,589,200	16.0	N.A.
1979	313	9,061,313	16,559,318	16.3	N.A.
1980	269	7,621,000	14,720,000	16.3	N.A.
1981	274	7,837,000	15,153,800	16.5	N.A.
1982	269	7,792,100	15,100,300	15.6	N.A.
1983	287	8,989,600	16,462,400	16.0	N.A.
1984	286	8,963,600	16,445,700	15.7	N.A.
1985	252	8,442,700	15,542,100	16.0	N.A.

(1) Figures as of December 31; other figures as of date indicated.

Source: 1947-1973--Sun Company, Analysis of World Tank Ship Fleet.
1974-1976--Sun Shipbuilding and Dry Dock Company.
1977-1985--U.S. Department of Transportation, Maritime Administration (Report E2-17).

WORLD TANK SHIP FLEET (ACTUAL AND T2-SE-A1 EQUIVALENTS)
(Ocean-going vessels of 2,000 gross tons and over)

	ACTUAL FLEET				T2-SE-A1
Year (1)	Number	Gross Tons	Deadweight Tons	Average Speed (knots)	Equivalents
Jan. 1, 1947	1,925	15,692,962	24,278,900	12.87	1,285.1
Oct. 1, 1947	1,868	15,286,141	23,585,800	13.0	1,271.4
April 1, 1948	1,863	15,364,543	23,692,400	12.9	1,264.3
Jan. 1, 1949	1,872	15,459,372	23,815,800	12.1	1,274.4
Sept. 1, 1949	1,955	16,249,603	24,932,400	13.2	1,352.3
Sept. 1, 1950	2,056	17,567,202	26,957,200	13.3	1,469.7
April 1, 1951	2,131	18,453,538	28,255,100	13.3	1,544.1
Oct. 1, 1952	2,292	20,417,100	31,318,300	13.4	1,726.8
1953	2,502	23,473,900	35,732,300	13.6	2,003.5
1954	2,602	25,733,900	39,137,300	13.9	2,244.0
1955	2,681	27,338,600	41,623,100	14.0	2,398.1
1956	1,778	29,455,500	44,882,600	14.2	2,614.2
1957	2,954	33,046,800	50,424,800	14.4	2,988.2
1958	3,146	37,020,100	56,640,700	14.6	3,403.3
1959	3,276	40,831,500	62,657,800	14.8	3,826.1
1960	3,264	42,801,300	65,780,400	15.1	4,076.0
1961	3,250	44,701,000	68,859,400	15.2	4,304.8
1962	3,259	46,630,100	71,995,700	15.3	4,542.9
1963	3,279	49,168,600	76,179,500	15.4	4,841.3
1964	3,359	54,468,900	85,125,700	15.6	5,455.3
1965	3,436	59,158,200	93,171,900	15.7	5,984.4
1966	3,524	64,787,600	102,908,800	15.7	6,641.4
1967	3,613	69,965,500	112,366,200	15.7	7,274.6
1968	3,775	78,169,730	128,128,100	15.8	8,311.9
1969	3,893	86,821,100	146,029,100	15.8	9,461.5
1970	4,002	97,599,779	167,940,200	15.8	10,924.9
1971	4,207	111,681,295	193,891,100	15.8	12,577.0
1972	4,342	124,431,430	221,204,200	15.8	14,340.5
1973	4,572	142,413,985	256,821,730	15.8	16,634.2
1974	4,892	165,723,032	302,276,779	15.7	19,542.5
1975	5,112	188,212,834	348,586,400	15.7	22,547.7
1976	5,140	203,938,871	382,533,975	15.7	24,762.9
1977	5,013	206,348,687	390,165,427	15.7	25,249.8
1978	4,731	202,581,402	386,123,276	15.7	24,984.4
1979	4,800	205,823,484	390,206,275	15.7	25,257.7

(1) Figures as of December 31; other figures as of date indicated.

Source: Sun Company, Analysis of World Tank Ship Fleet, 1947-1973
Sun Shipbuilding and Dry Dock Company, 1974-1976
Sun Transport Inc., Analysis of World Tank Ship Fleet, 1977-1979

Section XII
Table 5

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

Year of Construction	UNITED STATES No.	UNITED STATES Dead-Weight Tons	LIBERIA No.	LIBERIA Dead-Weight Tons	UNITED KINGDOM No.	UNITED KINGDOM Dead-Weight Tons	JAPAN No.	JAPAN Dead-Weight Tons	NORWAY No.	NORWAY Dead-Weight Tons	GREECE No.	GREECE Dead-Weight Tons
Before 1955	110	2,564,988	12	263,014	6	126,106	7	128,688	1	17,281	19	271,416
1955	6	184,687	3	116,360	3	63,162	0	0	0	0	6	105,093
1956	6	185,697	4	104,954	0	0	0	0	2	41,420	14	316,685
1957	10	333,468	7	231,313	1	8,959	1	3,677	1	19,706	7	169,451
1958	13	416,145	11	449,190	6	130,866	1	44,673	1	10,679	22	488,403
1959	15	549,097	18	970,876	6	131,034	2	63,951	3	59,759	20	508,183
1960	9	364,774	12	367,787	7	161,376	0	0	1	19,713	18	550,710
1961	7	310,691	19	680,674	7	248,409	2	54,805	3	125,999	9	283,683
1962	4	225,430	12	445,814	7	258,093	4	276,350	3	63,597	12	442,080
1963	5	201,523	17	1,119,892	7	276,645	1	74,259	3	84,963	15	861,644
1964	5	196,409	43	2,705,875	11	435,930	5	360,103	1	45,975	19	1,332,118
1965	2	95,499	44	2,615,585	13	477,689	10	637,051	1	20,791	25	1,706,697
1966	1	37,884	37	3,117,685	5	228,716	9	667,449	5	317,953	17	1,243,893
1967	1	94,518	40	3,377,269	8	517,065	12	906,582	10	462,106	23	1,927,749
1968	3	113,866	33	3,654,003	16	819,392	10	901,871	12	735,795	13	1,421,729
1969	9	420,703	35	4,570,172	11	1,224,361	20	2,679,922	12	1,368,931	14	2,408,120
1970	11	568,847	56	8,529,683	18	2,315,488	13	2,004,920	17	1,889,124	16	1,948,995
1971	8	473,420	78	10,299,128	21	2,108,182	25	3,593,584	24	2,909,981	14	1,178,692
1972	7	451,733	59	9,906,735	30	2,398,922	33	5,870,899	13	1,761,310	16	1,911,302
1973	8	777,861	68	12,118,784	31	2,980,141	47	5,946,034	23	4,422,034	13	1,075,055
1974	10	851,690	97	16,281,390	31	4,778,593	37	3,512,975	27	3,437,932	9	841,709
1975	13	927,970	117	18,510,541	34	4,417,194	33	4,105,567	34	4,916,093	2	162,390
1976	12	1,170,299	77	12,085,820	15	2,363,920	38	4,441,803	34	3,846,425	10	1,541,028
1977	15	1,620,099	41	6,179,878	11	1,090,012	23	827,266	18	1,550,086	3	525,249
1978	12	1,463,646	22	1,857,941	10	1,413,655	31	428,506	11	969,707	1	32,389
1979	11	1,958,374	22	1,476,313	9	522,296	50	1,194,154	13	476,950	2	167,717
Total	313	16,559,318	984	122,036,676	324	29,496,226	414	38,725,069	273	29,574,310	339	23,422,18
Average Age	11 yrs. 3 mos.		7 yrs. 4 mos.		7 yrs. 1 mo.		7 yrs. 1 mo.		6 yrs. 3 mos.		11 yrs. 6 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

	FRANCE		PANAMA		ITALY		SWEDEN		U.S.S.R.		WEST GERMANY	
Year of Construction	No.	Deadweight Tons	No.	Deadweight Tons	No.	Deadweight Tons	No.	Deadweight Tons	No.	Deadweight Tons	No.	Deadweight Tons
Before 1955	1	18,471	17	442,559	17	253,673	0	0	12	133,791	0	0
1955	0	0	0	0	4	59,790	0	0	10	103,263	0	0
1956	0	0	4	87,646	4	64,054	0	0	13	132,941	0	0
1957	0	0	2	61,884	6	128,747	0	0	13	126,615	0	0
1958	0	0	11	298,137	8	156,843	0	0	8	50,768	0	0
1959	0	0	13	473,088	4	81,244	0	0	14	151,755	0	0
1960	3	75,215	9	272,421	5	182,911	0	0	17	319,978	0	0
1961	3	112,088	5	174,921	6	191,483	0	0	11	155,249	0	0
1962	2	9,370	7	231,931	1	38,594	1	7,291	18	306,530	1	54,142
1963	2	91,344	6	140,880	5	259,774	0	0	19	401,045	1	48,800
1964	0	0	7	471,561	2	52,898	0	0	27	814,080	0	0
1965	3	92,727	9	557,841	4	59,906	2	7,978	24	564,950	0	0
1966	2	147,164	10	637,904	4	250,153	1	121,185	28	601,009	1	65,499
1967	2	37,315	5	379,959	2	99,380	1	3,400	19	240,685	2	217,809
1968	5	544,350	20	854,949	6	354,970	0	0	16	237,086	3	421,674
1969	7	825,955	11	175,739	7	249,641	6	367,207	24	262,114	1	257,995
1970	4	702,546	1	10,408	8	823,623	3	26,604	26	275,648	2	221,713
1971	14	2,257,040	5	262,745	5	634,772	0	0	13	102,950	1	2,591
1972	7	900,340	11	1,614,325	8	1,094,876	3	518,320	14	93,342	1	5,702
1973	12	2,171,232	8	462,065	16	1,411,201	10	642,717	16	110,593	3	317,158
1974	13	2,901,466	12	1,549,355	13	1,616,840	4	504,203	5	30,769	13	2,148,098
1975	7	1,162,281	14	1,343,940	18	1,601,067	5	749,239	19	681,903	7	633,729
1976	13	2,923,019	17	1,469,025	8	1,533,420	7	1,333,566	21	546,587	10	1,522,783
1977	6	957,448	8	1,061,674	6	649,917	4	574,565	16	372,342	2	12,811
1978	0	0	3	207,587	6	922,144	1	498,995	20	730,336	1	4,000
1979	1	554,000	5	56,026	1	10,250	7	507,900	16	459,173	0	0
Total	174	12,782,171	55	5,863,170	439	8,005,502	49	5,934,504	101	9,369,627	92	5,912,705
Average Age	7 yrs. 7 mos.		4 yrs. 7 mos.		10 yrs. 8 mos.		6 yrs. 3 mos.		5 yrs. 5 mos.		6 yrs. 7 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

	SPAIN		SINGAPORE		ALL OTHERS		TOTAL	
Year of Construction	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons
Before 1955								
1955	2	16,465	4	61,085	79	1,131,569	287	5,429,086
1956	0	0	1	5,325	12	164,661	45	802,341
1957	0	0	3	53,583	11	195,110	61	1,182,090
1958	0	0	2	42,122	14	225,765	64	1,351,707
1959	3	27,650	5	115,916	17	347,729	106	2,536,999
1960	2	28,810	3	102,158	23	604,936	123	3,724,891
1961	6	88,503	1	20,264	35	944,615	123	3,368,267
1962	2	43,597	0	0	22	562,829	96	2,944,428
1963	4	89,581	2	109,421	24	675,086	102	3,233,310
1964	2	18,710	1	44,066	16	684,269	100	4,307,814
1965	2	59,713	2	8,080	30	1,287,265	171	8,191,772
1966	0	0	3	162,471	35	1,594,501	158	9,193,466
1967	3	188,450	0	0	39	1,353,498	167	9,805,785
1968	4	204,048	1	3,397	39	2,234,075	181	12,501,205
1969	6	336,175	1	75,573	35	2,310,477	199	17,533,105
1970	6	261,297	0	0	30	2,939,636	211	22,518,532
1971	4	420,764	5	244,329	22	1,871,173	239	26,359,351
1972	4	818,344	3	207,544	24	974,059	233	28,527,753
1973	6	568,871	2	188,887	54	4,306,806	317	37,499,439
1974	6	738,787	12	1,023,726	75	6,185,734	364	46,403,267
1975	7	1,033,439	21	1,768,934	74	6,525,784	405	48,540,071
1976	9	1,163,379	15	1,364,351	71	6,076,414	357	43,381,839
1977	12	2,292,617	1	96,531	50	4,813,669	216	22,624,164
1978	7	895,958	0	0	36	1,617,006	161	11,041,870
1979	4	74,469	3	161,600	28	2,312,705	172	9,931,927
TOTAL	101	9,369,627	92	5,912,705	916	52,742,876	4,800	390,206,275
Average Age	5 yrs. 5 mos.		6 yrs. 7 mos.		7 yrs. 9 mos.		7 yrs. 8 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1983
(GALLONS)

SOURCE	NO.	OIL VOLUME	NO.	HAZARDOUS VOLUME	NO.	OTHER VOLUME	NO.	TOTAL VOLUME
VESSELS								
Tank Ships	276	145,778	14	64,729	20	4,250	310	214,757
Tank Barges	561	1,798,055	17	8,717	18	69,081	596	1,875,853
Dry Cargo Barges	13	1,275	0	-	3	97	16	1,370
Dry Cargo Ships	204	102,379	0	-	9	171	13	102,550
Combatants	245	26,265	1	30	6	353	252	26,648
Other	1,131	248,348	4	145	44	797	1,179	249,290
TOTAL	2,430	2,322,098	36	73,621	100	74,749	2,566	2,470,468
LAND VEHICLES								
Rail	29	28,284	2	1,015	2	500	33	29,799
Highway	319	155,021	19	17,457	32	18,200	370	190,678
Other	129	72,463	7	33,695	8	6,326	144	112,484
TOTAL	477	255,768	28	52,167	42	25,026	547	332,961
NON-TRANSPORT, ON/OFFSHORE								
Refinery	72	35,657	10	137,627	8	1,740	90	175,024
Bulk Storage	251	292,480	7	1,960	5	5,670	263	300,110
Onshore Production	134	606,393	0	-	6	169,265	140	775,658
Offshore Production	1,184	112,491	11	164	22	568	1,217	113,223
Other	244	47,477	51	521,687	48	5,538,276	341	6,107,440
TOTAL	1,883	1,094,498	79	661,438	89	5,715,519	2,051	7,471,455
PIPELINES	166	33,963	2	2	2	0	170	33,965
MARINE FAC. ON/OFFSHORE								
Fuel Transfer	24	4,446	0	-	0	0	24	4,446
Bulk Transfer	156	78,024	7	1,672	6	116	169	79,812
Non-Bulk Transfer	3	401	0	-	0	0	3	401
Other	91	81,290	8	182	18	41,658	117	123,130
TOTAL	274	164,161	15	1,854	24	41,774	313	207,789
LAND FACILITIES	47	13,933	5	1,166	9	3,624	61	18,723
MISC/UNKNOWN	4,234	4,483,552	124	1,008,793	606	10,370,959	4,964	15,863,304
GRAND TOTAL	9,511	8,367,973	289	1,799,041	872	16,231,651	10,672	26,398,665

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1983 and 1984.

Section XII
Table 6a

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1984
(GALLONS)

SOURCE	NUMBER	OIL VOLUME	NUMBER	HAZARDOUS VOLUME	NUMBER	OTHER VOLUME	NUMBER	TOTAL VOLUME
VESSELS								
Tank Ships	242	1,906,666	9	2,837	9	20,126	260	1,929,629
Tank Barges	524	2,469,002	18	52,902	13	22,005	555	2,543,909
Dry Cargo Barges	11	2,900	0	0	0	0	11	2,900
Dry Cargo Ships	168	1,469,828	0	0	6	22	174	1,469,850
Combatants	281	173,850	2	2	7	190	290	174,042
Other	1,170	212,987	4	74	122	413	1,296	13,474
TOTAL	2,396	6,235,233	33	55,815	157	42,756	2,586	6,333,804
LAND VEHICLES								
Rail	38	26,704	4	328	4	106	46	27,138
Highway	409	45,874	24	31,355	40	28,839	473	206,068
Other	139	149,118	7	268	10	5,741	156	155,127
TOTAL	586	321,696	35	31,951	54	34,686	675	388,333
NON-TRANSPORT, ON/OFFSHORE								
Refinery	74	86,220	6	4,737	5	8,555	85	99,512
Bulk Storage	295	1,456,765	12	74,978	14	35,695	321	1,567,438
Onshore Production	99	24,178	2	128	3	1,198	104	25,504
Offshore Production	1,170	56,555	8	99	13	1,097	1,191	57,751
Other	227	6,465	35	74,631	52	198,324	314	399,420
TOTAL	1,865	1,750,183	63	154,573	87	244,869	2,015	2,149,625
PIPELINES	54	2,613	1	2	1	42	56	2,657
MARINE FAC. ON/OFFSHORE								
Fuel Transfer	27	14,193	0	0	0	0	27	14,193
Bulk Transfer	150	74,754	10	14,222	8	12,043	168	101,019
Non-Bulk Transfer	3	26	0	0	0	0	3	26
Other	96	27,024	7	5,563	8	18,057	111	50,664
TOTAL	276	115,997	17	19,785	16	30,100	309	165,882
LAND FACILITIES	69	15,413	8	4,450	14	34,058	91	53,921
MISC/UNKNOWN	3,952	7,529,425	171	406,989	500	362,058	4,623	8,298,748
GRAND TOTAL	9,198	15,970,560	328	673,565	829	748,845	10,355	17,392,970

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1983 and 1984.

Section XII
Table 7

TOTAL AND AVERAGE CONSUMPTION OF MOTOR FUEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)
1947	30,872	20,086	651	6,650	7,243	1,089	176	778	4,420
1948	33,394	21,369	640	7,379	8,189	1,110	184	780	4,239
1949(3)	36,453	22,957	630	8,028	8,666	1,079	209	711	3,402
1950(3)	40,334	25,238	626	8,604	9,526	1,107	224	782	3,491
1951(3)	42,682	26,990	632	9,001	10,188	1,132	230	836	3,635
1952(3)	43,818	28,729	656	9,207	10,844	1,178	240	890	3,708
1953(3)	46,460	30,249	654	9,576	11,418	1,192	244	937	3,840
1954	48,413	30,915	639	9,726	12,541	1,289	233	755	3,240
1955	52,092	33,548	644	10,413	13,308	1,278	255	771	3,024
1956	54,249	35,326	651	10,737	13,978	1,302	255	802	3,145
1957	56,375	36,769	652	10,961	14,271	1,302	264	825	3,125
1958	57,392	38,095	644	11,159	14,514	1,301	270	809	2,996
1959(4)	60,132	40,056	666	11,671	15,453	1,324	265	823	3,106
1960	62,258	41,169	661	11,945	15,882	1,330	272	827	3,040
1961	63,870	42,033	658	12,291	16,443	1,338	281	830	2,954
1962	66,638	43,771	657	12,809	17,089	1,334	288	837	2,906
1963	69,842	45,246	648	13,360	18,432	1,380	298	838	2,812
1964	72,969	47,567	652	14,013	19,470	1,389	305	864	2,833
1965	76,634	50,275	656	14,795	19,935	1,347	314	894	2,847
1966	80,106	53,312	666	15,517	20,415	1,316	324	896	2,765
1967	82,367	55,110	669	16,193	21,673	1,338	338	910	2,692
1968	85,793	58,524	682	16,995	23,482	1,382	352	932	2,648
1969	89,156	62,448	700	17,871	24,727	1,384	364	947	2,602
1970	92,095	65,784	714	18,748	25,600	1,365	379	944	2,491
1971	96,144	69,514	723	19,802	27,086	1,368	397	947	2,385
1972	100,658	73,463	730	21,239	30,718	1,446	407	881	2,165
1973	106,119	78,011	735	23,233	31,615	1,361	426	847	1,988
1974	109,823	74,217	676	24,630	31,226	1,268	447	858	1,919

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.
(3) Total and average consumption calculated by the American Petroleum Institute for the years 1949-1953; Bureau of Public Roads data not available
(4) Includes Alaska and Hawaii beginning in 1959.

Source: Bureau of Public Roads, "Estimated Motor-Vehicle Travel in the United States and Related Data", Federal Highway Administration
American Petroleum Institute

TOTAL AND AVERAGE CONSUMPTION OF MOTOR FUEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)
1975	111,679	76,457	685	25,776	31,632	1,227	462	895	1,937
1976	115,170	78,847	685	27,779	35,890	1,292	478	964	2,015
1977	118,711	80,677	680	29,562	37,964	1,284	492	984	2,002
1978	121,717	83,775	688	31,703	40,271	1,270	500	1,021	2,041
1979	125,750	80,233	638	33,350	40,859	1,225	520	1,023	1,966
1980	127,448	73,375	603	33,637	40,150	1,194	529	1,076	2,034
1981	129,123	71,718	555	34,451	41,637	1,209	544	1,098	2,019
1982	129,500	72,848	563	35,145	39,416	1,122	559	1,120	2,003
1983	131,723	73,156	555	37,089	41,662	1,123	583	1,136	1,949
1984	133,751	71,160	532	37,394	46,353	1,240	584	1,203	2,061
1985	137,308	69,450	506	39,196	51,037	1,302	593	835	1,407
1986	140,693	71,404	508	40,069	52,911	1,320	594	869	1,463
1987	142,209	70,984	499	41,119	55,860	1,359	602	904	1,502

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.

Source: U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics," Table VM-1

TOTAL AND AVERAGE TRAVEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon
1947	300,440	9,732	14.95	66,203	9,955	9.14	4,251	24,153	5.46
1948	319,665	9,573	14.96	74,009	10,030	9.04	4,283	23,277	5.49
1949(3)	342,478	9,395	14.92	77,731	9,682	8.97	4,252	20,344	5.98
1950(3)	363,613	9,015	14.40	90,552	10,524	9.51	4,081	18,219	5.22
1951(3)	392,131	9,187	14.54	94,844	10,537	9.31	4,118	17,904	4.92
1952(3)	410,187	9,361	14.27	99,060	10,759	9.13	4,334	18,058	4.87
1953(3)	435,351	9,370	14.39	104,633	10,927	9.17	4,449	18,234	4.75
1954	450,605	9,308	14.57	105,844	10,833	8.44	4,408	18,918	5.84
1955	487,540	9,359	14.53	111,387	10,697	8.37	4,507	17,675	5.85
1956	507,138	9,348	14.36	116,100	10,813	8.31	4,605	18,059	5.74
1957	529,405	9,391	14.40	113,206	10,328	7.93	4,393	16,640	5.32
1958	544,873	9,494	14.30	115,470	10,348	7.96	4,310	15,963	5.33
1959(4)	572,976	9,529	14.30	123,154	10,552	7.97	4,348	16,408	5.28
1960	588,083	9,446	14.28	126,409	10,583	7.96	4,353	16,004	5.26
1961	604,557	9,465	14.38	128,582	10,461	7.82	4,396	15,644	5.30
1962	629,097	9,441	14.37	133,289	10,406	7.80	4,466	15,507	5.34
1963	645,371	9,240	14.26	155,569	11,644	8.44	4,483	15,044	5.35
1964	677,613	9,286	14.25	164,271	11,723	8.43	4,616	15,134	5.34
1965	711,594	9,286	14.15	171,436	11,587	8.60	4,782	15,229	5.35
1966	751,740	9,384	14.10	173,905	11,207	8.52	4,852	14,975	5.46
1967	774,203	9,399	14.05	182,456	11,268	8.42	4,894	14,479	5.38
1968	814,030	9,488	13.91	196,651	11,571	8.37	4,968	14,114	5.33
1969	858,858	9,633	13.75	206,680	11,565	8.36	5,037	13,838	5.32
1970	900,992	9,783	13.70	214,670	11,450	8.39	5,043	13,306	5.34
1971	954,155	9,924	13.73	227,037	11,465	8.38	5,097	12,807	5.38
1972	1,003,498	9,969	13.67	259,735	12,229	8.46	5,109	12,553	5.80
1973	1,036,455	9,767	13.29	267,147	11,499	8.45	4,960	11,643	5.86
1974	1,013,068	9,225	13.65	267,519	10,861	8.57	5,060	11,320	5.90

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.
(3) Total and average consumption calculated by the American Petroleum Institute for the years 1949-1953; Bureau of Public Roads data not available
(4) Includes Alaska and Hawaii beginning in 1959

Source: Bureau of Public Roads, "Estimated Motor-Vehicle Travel in the United States and Related Data." Federal Highway Administration; after 1969 American Petroleum Institute

TOTAL AND AVERAGE TRAVEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon
1975	1,050,472	9,406	13.74	274,454	10,648	8,68	5,148	11,140	5.75
1976	1,098,147	9,535	13.93	307,957	11,086	8.58	5,761	12,045	5.98
1977	1,141,166	9,613	14.15	329,474	11,145	8.68	5,887	11,973	5.98
1978	1,194,287	9,812	14.26	347,909	10,974	8.64	6,072	12,143	5.95
1979	1,162,528	9,245	14.49	360,500	10,810	8.82	6,105	11,732	5.97
1980	1,129,887	8,865	15.32	384,570	11,433	9.58	6,400	12,103	5.95
1981	1,124,843	6,711	15.68	425,127	12,340	10.21	6,501	11,953	5.92
1982	1,191,623	9,202	16.36	394,219	11,217	10.00	6,639	11,872	5.93
1983	1,229,697	9,335	16.81	421,126	11,335	10.11	6,724	11,536	5.92
1984	1,267,291	9,475	17.80	444,054	11,875	9.58	6,736	11,534	5.60
1985	1,269,651	9,247	18.28	499,652	12,747	9.79	4,876	8,216	5.84
1986	1,310,611	9,315	18.35	519,188	12,957	9.81	5,073	8,544	5.84
1987	1,367,046	9,613	19.26	551,955	13,423	9.88	5,326	8,846	5.89

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.

Source: U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics," Table VM-1

Section XII
Table 9

U.S. CAR SALES BY MARKET-CLASS COMPARISONS

Year	Subcompact	Compact	Intermediate	Standard	Luxury	Import	Total Sales
1970	1.82	19.75	23.50	36.76	2.91	15.26	8,396,595
1971	7.42	15.79	20.84	37.07	3.66	15.22	10,234,027
1972	8.17	15.34	22.59	35.38	3.76	14.76	10,935,365
1973	10.74	16.77	23.37	29.80	3.94	15.83	11,427,478
1974	10.60	22.72	24.41	22.72	3.71	15.85	8,851,265
1975	12.26	22.92	23.85	17.94	4.74	18.29	8,627,883
1976	9.90	24.12	27.76	18.80	4.67	14.78	10,099,573
1977	8.52	21.16	26.40	20.37	5.00	18.55	11,178,554
1978	8.77	22.90	26.60	18.42	5.62	17.69	11,303,909
1979	12.86	20.89	23.79	15.14	5.47	21.85	10,641,099
1980	15.41	20.96	21.37	11.09	4.48	26.69	8,973,345
1981	17.11	20.22	20.40	10.16	4.86	27.25	8,531,531
1982	16.65	17.51	19.03	13.39	5.58	27.84	7,977,570
1983	12.65	16.75	26.17	9.97	8.50	25.96	9,177,777
1984	14.04	18.08	25.54	10.61	8.25	23.48	10,391,775
1985	13.97	17.11	26.39	8.77	8.06	25.70	11,042,658
1986	14.27	14.92	26.31	8.76	7.47	28.27	11,463,092
1987(p)	9.56	19.02	26.32	13.66	N.A.	30.76	10,226,588

(p) Preliminary
N.A. = Not Available

Source: Automotive News, Market Data Book Issues
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Section XII
Table 10

MILEAGE AND DELIVERIES FOR U.S. LIQUID PIPELINES

	Miles of Pipelines				Deliveries (mb)		
		Trunk					
Year	Gathering	Crude	Products	Total	Crude	Products	Total
1979	36,927	58,606	74,261	169,794	6,728,193	4,412,059	11,140,252
1980	35,279	59,560	74,510	169,349	6,404,640	4,194,940	10,599,580
1981	38,588	57,904	76,353	172,815	6,069,575	4,152,962	10,222,537
1982	35,580	59,567	77,402	172,549	5,967,624	4,213,086	10,180,710
1983	30,966	57,466	79,387	167,819	6,020,301	4,289,301	10,309,602
1984	36,072	56,975	80,875	173,922	5,671,448	4,552,237	10,223,685
1985	35,021	55,844	80,536	171,401	6,238,731	4,505,992	10,744,723
1986	34,209	54,153	81,652	170,014	6,286,433	4,715,889	11,082,323

Source: The Oil and Gas Journal, Pipeline Economics issue.

MILEAGE AND COMPRESSOR STATIONS FOR U.S. NATURAL GAS PIPELINES

Year	Miles of Pipeline				Total Compressor Stations		
	Transmission	Field	Storage	Total	Transmission	Other	Total
1979	190,338	65,520	4,876	260,734	1,113	877	1,990
1980	189,648	68,641	7,252	265,541	1,127	866	1,993
1981	196,942	72,812	4,610	274,634	1,097	860	1,957
1982	204,896	76,073	6,030	286,999	1,116	995	2,111
1983	203,403	75,095	6,706	285,204	1,367	1,342	2,709
1984	187,465	66,172	4,742	258,379	1,152	898	2,050
1985	197,727	77,145	4,523	279,395	1,629	726	2,355
1986	201,467	72,934	7,480	281,881	1,537	911	2,448

Source: The Oil and Gas Journal, Pipeline Economics issue.

SECTION XIII. NATURAL GAS

Table 1. Estimated Proved World Reserves of Natural Gas

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Section XIII
Table 1

ESTIMATED PROVED WORLD RESERVES OF NATURAL GAS
ANNUALLY AS OF JANUARY 1
(Trillions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist(1) Nations	Total World
1967	289.3	45.0	64.6	398.9	215.1	158.2	32.5	87.7	892.4	150.9	1,043.3
1968	292.9	48.0	67.1	408.0	220.2	167.2	40.1	131.0	966.5	219.0	1,185.5
1969	287.3	46.5	62.9	396.7	223.6	168.3	52.7	138.4	979.7	346.0	1,325.7
1970	275.1	50.7	163.2	489.0	235.1	198.1	67.5	147.5	1,137.8	353.5	1,491.3
1971	290.7(1)	60.5	73.1	424.3	354.1	191.5	56.3	146.7	1,172.9	441.2	1,614.1
1972	278.8(1)	54.4	72.7	405.9	343.8	193.0	69.8	161.6	1,174.1	559.8	1,733.9
1973	266.1(1)	55.0	79.2	400.3	344.0	189.0	101.2	176.6	1,211.1	666.4	1,877.5
1974	250.0(1)	50.3	91.3	391.6	413.1	187.7	114.2	192.2	1,298.8	737.2	2,036.0
1975	237.1(1)	52.5	100.2	389.8	672.4	315.0	115.9	201.1	1,694.2	848.0	2,542.2
1976	228.2(1)	53.4	90.5	372.1	538.1	207.2	111.6	179.9	1,408.9	836.5	2,245.4
1977	216.0(1)	56.0	90.3	362.3	535.9	209.1	120.0	140.9	1,368.2	954.5	2,322.7
1978	208.9(1)	58.0	108.5	375.4	719.1	207.5	122.7	137.3	1,562.0	956.4	2,518.4
1979	200.3(1)	59.0	113.0	372.3	730.2	186.3	119.9	142.4	1,551.1	946.3	2,497.4
1980	194.9(1)	85.5	144.5	424.9	739.8	210.4	128.8	134.9	1,638.8	936.0	2,574.8
1981	199.0(1)	87.3	149.0	435.3	751.9	208.5	126.3	158.3	1,680.3	955.4	2,635.7
1982	201.7(1)	89.9	176.3	467.9	761.9	211.7	127.6	151.2	1,720.3	1,194.7	2,915.0
1983	201.5(1)	97.0	186.6	485.1	769.2	189.4	146.2	157.3	1,747.2	1,283.8	3,031.0
1984	200.2(1)	90.5	186.4	477.1	774.0	189.6	156.2	158.3	1,755.2	1,446.8	3,202.0
1985	197.5(1)	92.3	184.9	474.7	869.4	187.2	166.2	206.7	1,904.2	1,497.4	3,401.6
1986	193.4(1)	99.7	189.3	482.3	855.9	198.3	171.5	226.4	1,934.4	1,546.0	3,480.4
1987	191.6(1)	99.6	190.1	475.1	925.3	201.4	198.6	229.7	2,036.4	1,595.8	3,632.2
1988	187.2(1)	98.0	226.7	511.4	1,084.0	248.6	224.8	218.2	2,287.5	1,510.0	3,797.5
1989	187.2(1)	95.1	236.1	518.4	1,182.1	253.3	240.7	200.1	2,394.6	2,560.7	3,955.3

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(1) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska (discovered in 1968) for which transportation facilities are not yet available.

Source: 1967-1980: United States-American Gas Association, Committee on Natural Gas Reserves
1981-1988: United States-Department of Energy
Rest of the World-The Oil & Gas Journal, "Worldwide Report" issues
1989: The Oil and Gas Journal, "Worldwide Report" issue.

THE SUPPLY OF UNITED STATES NATURAL GAS
(Millions of cubic feet - 14.72 psia at 60 F.)

Year	Proved Reserves at Start of Year	Reserve Revisions, Extensions and Discoveries During Year	Net Change in Underground Storage(4)	Production During Year(1)	Proved Reserves at Year-end
1947	160,575,901	10,980,824	N.A.	5,629,811	165,926,914
1948	165,926,914	13,898,572	51,482	6,007,628	173,869,340
1949	173,869,340	12,674,299	82,746	6,245,041	180,381,344(5)
1950	179,401,693(5)	11,984,290	54,006	6,855,244	184,584,745
1951	184,584,745	15,965,808	132,030	7,923,673	192,758,910
1952	192,758,910	14,267,606	197,766	8,592,716	198,631,566
1953	198,631,566	20,008,051	513,629(2)	9,188,365	210,298,763
1954	210,298,763	9,547,074	90,408	9,375,314	210,560,931
1955	210,560,931	21,897,616	87,164	10,063,167	222,482,544
1956	222,482,544	24,716,115	133,241	10,848,685	236,483,215
1957	236,483,215	20,008,051	178,761	11,439,890	245,230,137
1958	245,230,137	18,896,724	57,582	11,422,651	252,761,792
1959	252,761,792	20,621,249	160,453	12,373,036	261,170,431
1960	261,170,431	13,893,978	281,272	13,019,356	262,326,326
1961	262,326,326	17,166,421	159,544	13,378,649	266,273,642
1962	266,273,642	19,483,958	159,231	13,637,973	272,278,858
1963	272,278,858*	18,164,667	253,733	14,546,025	276,151,233
1964	276,151,233	20,252,139	195,110	15,347,028	281,251,454
1965	281,251,454	21,319,279	150,483	16,252,293	286,468,923
1966	286,468,923	20,220,432	134,523	17,491,073	289,332,805
1967	289,332,805	21,804,333	151,403	18,380,838	292,907,703
1968	292,907,703	13,697,008	118,569	19,373,428	287,349,852
1969	287,349,852	8,375,004	107,169	20,723,190	275,108,835
1970	275,108,835	37,196,359(3)	402,018	21,960,804	290,746,408(3)
1971	290,746,408(3)	9,825,421	310,301	22,076,512	278,805,618(3)
1972	278,805,618(3)	9,634,563	156,563	22,511,898	266,084,846(3)
1973	266,084,846(3)	6,825,049	-354,282	22,605,406	249,950,207(3)
1974	249,950,207(3)	8,679,184	-178,424	21,318,470	237,132,497(3)

N.A. Not Available

(1) Estimated.

(2) All native gas in storage reservoirs formerly classified as proved reserves of natural gas is included in this figure.

* Excludes gas loss due to natural gas liquids recovery.

(3) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska, (discovered in 1968).

(4) The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories. (Adjustments include change of reporting basis starting in 1973 to report only gas reserves considered recoverable, in effect, reducing gas reserves by 1,024,140 MMCF that would have been reported since 1972 using former basis).

(5) Natural gas reserves have been revised back to 1950. Because of this, proved reserves at year-end 1949 and proved reserves at start of year 1950 are not the same.

Source: American Gas Association, Committee on Natural Gas reserves, GAS FACTS

Section XIII
Table 2a

THE SUPPLY OF UNITED STATES NATURAL GAS
(Millions of cubic feet - 14.72 psia at 60 F.)

Year	Proved Reserves at Start of Year(3)	Reserve Revisions, Extensions and Discoveries During Year	Net Change in Underground Storage(4)	Production During Year(1)	Proved Reserves at Year-end(3)
1975	237,132,497	10,483,688	302,561	19,718,570	228,200,176
1976	228,200,176	7,555,468	-187,550	19,542,020	216,026,047
1977	216,026,047	11,851,924	446,930	19,447,050	208,877,878
1978	208,877,878	10,586,144	148,733	19,311,048	200,301,707
1979	200,301,707	14,285,947	239,323	19,910,353	194,916,624
1980(5)	200,997,000	16,723,000	N.A.	18,699,000	199,021,000
1981	199,021,000	21,446,000	N.A.	18,737,000	201,730,000
1982	201,730,000	17,288,000	N.A.	17,506,000	201,512,000
1983	201,512,000	14,523,000	N.A.	15,788,000	200,247,000
1984	200,247,000	14,409,000	N.A.	17,193,000	197,463,000
1985	197,463,000	11,891,000	N.A.	15,985,000	193,369,000
1986	193,369,000	13,827,000	N.A.	15,610,000	191,586,000
1987	191,586,000	11,739,000	N.A.	16,114,000	187,211,000

N.A. Not Available

(1) Estimated.

(3) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska.

(4) The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories. (Adjustments include change of reporting basis starting in 1973 to report only gas reserves considered recoverable, in effect, reducing gas reserves by 1,024,140 MMCF that would have been reported since 1972 using former basis).

(5) Beginning in 1980, the data used are from the Department of Energy. Because of different methodology, the reserves at start of year (from DOE) differ from reserves at year-end 1979 (from AGA).

Source: 1975-1979--American Gas Association, Committee on Natural Gas Reserves, GAS FACTS.
1980-1987--U.S. Department of Energy, Energy Information Administration, US Crude and Natural Gas and NGL Reserves.

Section XIII
Table 3

THE RESERVES OF U.S. NATURAL GAS LIQUIDS
(Thousands of Barrels)

Year	Proved Reserves at Start of Year	Reserve Revisions Extensions & Discoveries	Production	Proved Reserves at Year-end	Indicated Years Supply at Year-end
1947	3,163,219	251,538	160,782	3,253,975	20.2
1948	3,253,975	470,557	183,749	3,540,783	19.3
1949	3,540,783	386,776	198,547	3,729,012	18.8
1950	3,729,012	766,062	227,411	4,267,663	18.8
1951	4,267,663	723,991	267,052	4,724,602	17.7
1952	4,724,602	556,838	284,789	4,996,651	17.5
1953	4,996,651	743,969	302,698	5,437,922	18.0
1954	5,437,922	107,350	300,815	5,244,457	17.4
1955	5,244,457	514,508	320,400	5,438,565	17.0
1956	5,438,565	809,820	346,053	5,902,332	17.1
1957	5,902,332	137,392	352,364	5,687,360	16.1
1958	5,687,360	858,206	341,548	6,204,018	18.2
1959	6,204,018	703,444	385,154	6,522,308	16.9
1960	6,522,308	725,130	431,379	6,816,059	15.8
1961	6,816,059	694,686	461,649	7,049,096	15.3
1962	7,049,096	732,549	470,128	7,311,517	15.6
1963	7,311,517	878,120	515,659	7,673,978	14.9
1964	7,673,978	608,744	536,090	7,746,632	14.4
1965	7,746,632	832,312	555,410	8,023,534	14.4
1966	8,023,534	894,116	588,684	8,328,966	14.1
1967	8,328,966	929,758	644,493	8,614,231	13.4
1968	8,614,231	685,659	701,782	8,598,108	12.2
1969	8,598,108	281,028	735,962	8,143,174	11.1
1970	8,143,174	307,579	747,812	7,702,941	10.3
1971	7,702,941	347,720	746,434	7,304,227	9.8
1972	7,304,227	238,273	755,941	6,786,559	9.0
1973	6,786,559	408,979	740,831	6,454,707	8.7
1974	6,454,707	619,841	724,099	6,350,449	8.8
1975	6,350,449	618,504	701,123	6,267,830	8.9
1976	6,267,830	834,766	700,629	6,401,967	9.1
1977	6,401,967	291,171	698,773	5,994,365	8.6
1978	5,994,365	595,666	664,179	5,925,852	8.9
1979(1)	6,772,000	570,000	727,000	6,615,000	9.1
1980	6,615,000	844,000	731,000	6,728,000	9.1
1981	6,728,000	1,081,000	741,000	7,068,000	9.3
1982	7,068,000	874,000	721,000	7,221,000	9.9
1983	7,221,000	1,405,000	725,000	7,901,000	10.9
1984	7,901,000	518,000	776,000	7,643,000	9.8

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(1)Figures beginning with 1979 are from the Department of Energy data, using a different methodology from prior data. Therefore, year-end 1978 and start of year 1979 data are not the same.

Source: American Gas Association through 1978.
Department of Energy beginning in 1979.

THE RESERVES OF U.S. NATURAL GAS LIQUIDS
(Thousands of Barrels)

Year	Proved Reserves at Start of Year	Reserve Revisions Extensions & Discoveries	Production	Proved Reserves at Year-End	Indicated Years Supply at Year-End
1985	7,643,000	1,054,000	753,000	7,944,000	10.5
1986	7,944,000	959,000	738,000	8,165,000	11.1
1987	8,165,000	729,000	747,000	8,147,000	10.9

Source: DOE/EIA--U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual.

Section XIII
Table 4

WORLD MARKETED PRODUCTION OF NATURAL GAS BY AREA
(Billions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1950	6,282.1	71.7	260.0	6,613.8	0	0	55.4	33.2	6,702.4	N.A.	6,702.4
1951	7,457.4	84.0	201.4	7,742.7	0	0	72.7	52.0	7,867.4	255.3	8,122.7
1952	8,013.5	93.7	223.5	8,330.7	0	0	85.2	61.9	8,477.8	305.4	8,783.2
1953	8,396.9	106.7	255.0	8,758.7	0	.1	99.6	100.4	8,958.8	503.6	9,462.4
1954	8,742.5	127.6	273.1	9,143.3	0	.3	106.3	131.3	9,381.1	538.3	9,919.4
1955	9,405.4	150.8	356.2	9,912.3	0	.5	82.3	189.8	10,184.9	524.9	10,709.8
1956	10,081.9	169.2	368.2	10,619.2	15.6	.5	101.8	227.5	10,964.6	656.9	11,621.5
1957	10,680.3	220.0	458.6	11,358.9	25.6	.4	114.2	251.8	11,750.9	926.2	12,677.0
1958	11,030.3	337.8	616.1	11,984.2	26.3	4.4	119.7	267.5	12,402.1	1,379.7	13,781.7
1959	12,046.1	417.3	714.0	13,177.4	44.5	14.4	133.3	346.9	13,716.6	1,688.0	15,404.6
1960	12,771.0	523.0	775.9	14,069.9	57.3	5.8	157.8	433.8	14,724.7	2,191.9	16,916.6
1961	13,254.0	655.7	864.1	14,773.8	172.1	20.4	170.7	502.2	15,639.2	2,748.4	18,387.6
1962	13,876.6	946.7	956.4	15,779.8	173.3	31.3	193.7	548.4	16,726.4	3,366.0	20,092.4
1963	14,666.6	1,111.5	702.5	16,480.5	149.2	16.0	135.2	560.0	17,340.8	3,678.2	21,018.9
1964	15,462.1	1,327.7	721.6	17,511.4	162.6	33.2	155.3	608.9	18,471.4	4,397.1	22,868.5
1965	16,039.8	1,442.4	779.9	18,262.2	171.2	67.9	168.3	671.1	19,340.6	5,139.6	24,480.2
1966	17,206.6	1,341.8	828.8	19,377.2	193.1	82.1	198.3	789.9	20,640.7	5,735.5	26,394.2
1967	18,171.3	1,471.7	883.5	20,526.5	229.3	85.0	215.3	1,018.6	22,074.8	6,323.0	28,397.8
1968	19,322.4	1,692.3	1,061.6	22,076.3	388.2	96.5	330.3	1,439.1	24,330.3	7,072.9	31,403.1
1969	20,698.2	1,977.8	1,143.3	23,819.4	441.7	113.8	431.1	2,009.7	26,815.7	7,569.4	34,385.1
1970	21,920.6	2,277.1	1,276.6	25,474.4	454.1	122.2	525.3	2,789.0	29,365.0	8,728.9	38,094.0
1971	22,493.0	2,499.0	1,362.6	26,354.7	698.0	522.6	559.8	3,580.7	31,715.8	9,472.6	41,188.4
1972	22,531.7	2,913.5	1,456.6	26,901.8	905.6	471.8	606.0	4,501.1	33,386.4	10,127.5	43,513.9
1973	22,647.5	3,119.5	1,615.8	27,382.8	1,276.9	585.8	775.9	5,148.0	35,169.4	10,958.4	46,127.8
1974	21,600.5	3,045.5	1,659.1	26,305.1	1,423.4	607.7	880.9	5,837.0	35,054.2	12,117.3	47,171.5

N.A. Not Available

Source: 1950-1967: U.S. Bureau of Mines, Minerals Yearbook, Annual
1968-1974: U.S. Bureau of Mines, World Natural Gas

Section XIII
Table 4a

WORLD MARKETED PRODUCTION OF NATURAL GAS BY AREA
(Billions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1975	20,108.7	3,075.7	1,735.1	24,919.4	1,436.2	670.4	938.4	5,966.7	33,931.1	13,276.3	47,207.3
1976	19,952.4	3,067.4	1,722.1	24,741.9	1,492.8	905.8	1,173.9	6,343.6	34,657.9	14,801.3	49,459.2
1977	20,025.5	3,230.7	1,865.7	25,121.9	1,507.0	919.5	1,329.0	6,502.5	35,379.8	14,720.3	50,100.1
1978	19,974.0	3,128.1	2,012.9	25,115.0	1,579.5	1,117.4	1,469.2	6,649.9	35,930.9	15,818.4	51,749.3
1979	20,471.3	3,646.5	2,610.0	26,727.8	1,624.7	1,027.9	1,827.9	6,866.8	38,075.1	19,591.4	57,666.5
1980	20,179.7	2,668.3	3,297.5	26,344.6	1,221.3	884.7	2,558.4	6,668.7	37,677.7	21,069.9	58,747.6
1981	19,955.8	2,623.0	3,227.0	26,027.7	1,542.0	1,947.0	2,765.0	6,906.0	39,187.7	19,210.0	58,397.7
1982	18,519.7	2,546.1	3,071.5	24,137.3	1,799.7	1,168.9	2,176.6	6,142.1	35,424.6	20,258.0	55,682.6
1983	16,822.1	2,414.1	3,340.5	22,576.7	1,633.0	1,143.8	2,187.7	6,383.4	33,924.6	21,383.0	55,307.6
1984	18,229.6	2,651.8	3,451.8	24,333.2	1,533.4	1,629.1	2,530.7	6,795.4	36,821.8	23,272.1	60,093.9
1985	17,198.0	3,196.3	3,445.3	23,849.6	1,668.3	1,720.7	2,924.5	6,827.2	36,990.3	25,453.4	62,443.7
1986	16,791.0	3,168.3	3,413.6	23,372.9	1,822.8	1,661.8	3,320.9	6,519.6	36,698.0	27,088.2	63,786.2
1987	17,150.0	3,472.7	3,354.5	23,977.2	2,624.1	2,025.7	3,797.6	7,043.9	39,468.5	28,742.5	68,211.0

Source: 1975-1978: U.S. Energy Information Administration, World Natural Gas, Annuals
1979-1987: U.S. Energy Information Administration, United States only; Rest of world, Oil and Gas Journal

SALIENT STATISTICS OF NATURAL GAS IN THE U.S.
(Millions of Cubic Feet)

Year	Marketed Production	Exports	Consumption	Imports	Wellhead Value (m $)	Total Withdrawn from Storage	Stored	Lost in Transmission	Vented and Flared
1947	4,582,173	18,149	4,426,544	-	$274,709	86,643	96,316	127,807	1,067,938
1948	5,148,020	18,704	4,945,149	-	333,173	79,035	136,406	126,796	810,178
1949	5,419,736	20,054	5,195,484	-	344,034	106,368	172,051	138,515	853,884
1950	6,282,060	25,727	6,026,404	-	408,521	175,260	229,752	175,437	801,044
1951	7,457,359	24,163	7,102,562	-	542,964	209,428	347,690	192,372	793,186
1952	8,013,457	27,456	7,613,478	7,807	623,649	221,909	398,593	203,646	848,608
1953	8,396,916	28,322	7,979,338	9,225	774,966	246,802	404,838	240,445	810,276
1954	8,742,546	28,726	8,402,852	6,647	882,501	330,177	432,283	215,709	723,567
1955	9,405,351	31,029	9,070,343	10,888	978,357	437,251	505,185	246,933	773,639
1956	10,081,923	35,963	9,706,878	10,380	1,083,812	452,762	589,232	212,992	727,004
1957	10,680,258	41,655	10,279,775	37,941	1,201,759	480,981	672,377	205,373	809,148
1958	11,030,298	38,719	10,760,698	135,797	1,317,492	621,091	704,172	283,597	633,412
1959	12,046,115	18,413	11,819,638	133,990	1,556,800	668,743	787,485	223,312	571,048
1960	12,771,038	11,332	12,509,427	155,646	1,789,970	712,658	844,352	274,231	562,877
1961	13,182,029	10,689	13,010,654	217,671	1,996,241	694,258	839,083	233,532	523,533
1962	13,801,244	15,728	13,814,678	399,353	2,145,301	849,695	935,712	284,174	425,629
1963	14,666,559	16,865	14,560,953	430,997	2,328,030	911,741	1,041,802	362,677	383,408
1964	15,462,143	19,497	15,451,979	440,918	2,387,689	880,498	1,099,302	302,781	339,996
1965	16,039,753	26,132	16,033,189	456,394	2,494,542	959,865	1,077,980	318,711	319,143
1966	17,206,628	14,639	17,191,711	479,780	2,702,759	1,141,614	1,210,469	401,203	374,695
1967	18,171,325	81,614	18,172,894	564,226	2,898,741	1,132,534	1,317,363	296,214	489,877
1968	19,322,400	93,745	19,459,939	651,885	3,168,688	1,329,536	1,425,075	325,062	516,508
1969	20,698,240	51,304	20,922,800	726,951	3,455,615	1,379,488	1,498,988	331,587	525,750

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 5a

SALIENT STATISTICS OF NATURAL GAS IN THE U.S.
(Millions of Cubic Feet)

Year	Marketed Production	Exports	Consumption	Imports	Total Wellhead Value (m $)	Withdrawn from Storage	Stored	Lost in Transmission	Vented and Flared
1970	21,920,642	69,813	22,045,799	820,780	$3,745,680	1,458,607	1,856,767	227,650	489,460
1971	22,493,012	80,212	22,676,581	934,548	4,085,482	1,507,630	1,839,398	338,999	284,561
1972	22,531,698	78,013	23,009,445	1,019,496	4,180,462	1,757,218	1,892,952	328,002	248,119
1973	22,647,549	77,169	22,965,914	1,032,901	4,894,072	1,532,820	1,974,324	195,863	248,292
1974	21,600,522	76,789	22,110,623	959,284	6,573,402	1,700,546	1,784,209	288,731	169,381
1975	20,108,661	72,675	20,409,875	953,008	8,945,062	1,759,565	2,103,619	235,065	133,913
1976	19,952,438	64,711	20,800,582	963,768	11,571,776	1,921,017	1,755,690	216,240	131,930
1977	20,025,463	55,626	19,520,581	1,011,001	15,833,719	1,749,884	2,306,515	41,063	136,807
1978	19,974,033	52,532	19,627,478	965,545	18,084,914	2,157,765	2,278,002	287,201	153,350
1979	20,471,260	55,673	20,240,761	1,253,383	24,113,634	2,047,000	2,295,034	372,330	167,019
1980	20,179,724	48,731	19,877,293	984,767	32,043,704	1,909,902	1,896,284	639,559	125,451
1981	19,955,823	59,372	19,403,858	903,949	39,551,253	1,886,940	2,179,683	500,501	98,017
1982	18,519,675	51,728	18,001,055	933,336	45,496,765	2,093,644	2,399,355	474,731	93,365
1983	16,822,144	54,638	16,834,914	919,752	43,614,369	2,142,027	1,700,426	642,059	94,962
1984	18,229,638	54,753	17,950,528	843,060	48,404,611	2,064,292	2,252,347	142,607	107,913
1985	17,197,999	57,095	17,280,943	949,372	43,182,598	2,359,405	2,127,932	354,065	94,778
1986	16,790,910	61,271	16,221,296	750,130	32,607,825	1,811,697	1,952,103	426,726	97,633
1987	17,348,537	54,020	17,136,938	992,104	28,888,630	1,880,951	1,887,110	432,893	123,707

(1) Also includes changes in above ground storage and gas unaccounted for.

Source: U.S. Energy Information Administration, Natural Gas Annuals

Section XIII
Table 6

U.S. IMPORTS OF NATURAL GAS BY SOURCE
(Billions of Cubic Feet)

Year	Canada	Mexico	Algeria(3)	Total Imports	U.S. Natural Gas Consumption
1968	604	47	NA	652	19,460
1969	680	47	NA	727	20,923
1970	779(1)	41	(2)	821	22,046
1971	911(1)	21	1	935	22,677
1972	1,009(1)	8	2	1,019	23,101
1973	1,027(1)	2	3	1,033	22,049
1974	959	(2)	0	959	22,231
1975	948	0	5	953	19,535
1976	954	0	10	964	19,946
1977	997	2	11	1,011	19,521
1978	881	0	84	966	19,627
1979	1,001	0	253	1,253	20,241
1980	797	102	86	985	19,877
1981	762(1)	105	37	904	19,404
1982	783	95	55	933	18,001
1983	712	75	131	918	16,835
1984	755	52	36	843	17,951
1985	926	0	24	950	17,281
1986	748	0	0	749(4)	16,221
1987	1,007	0	0	1,007	17,137

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(1) Includes approximately 1 billion cubic feet of liquefied natural gas in 1970, 2 billion cubic feet in 1971, 0.2 billion cubic feet in 1972, 0.7 billion cubic feet in 1973, and 0.6 billion cubic feet in 1981.
(2) Less than one-half unit.
(3) Liquefied natural gas.
(4) Includes a small amount from Indonesia.

Source: U.S. Energy Information Administration, 1968-1977: World Natural Gas Annuals
1978-1981: U.S. Imports and Exports of Natural Gas
1982-1987: Natural Gas Monthly, May issue

Section XIII
Table 7

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1975	Nation	1976
1. U.S.S.R.	810,000	1. U.S.S.R	800,000
2. Iran	330,000	2. Iran	329,500
3. United States	237,132	3. United States	228,200
4. Algeria	229,000	4. Algeria	126,000
5. United Arab Emirates(1)	200,000	5. Saudi Arabia	103,000
6. Netherlands	94,800	6. Netherlands	70,000
7. Canada	56,708	7. Canada	56,975
8. Saudi Arabia	55,000	8. United Kingdom	50,000
9. United Kingdom	50,000	9. Nigeria	44,300
10. Nigeria	45,500	10. Venezuela	42,000
11. Venezuela	43,000	11. Australia	32,500
12. Australia	38,000	12. Kuwait	31,800
13. Kuwait	32,000	13. Libya	26,300
14. Iraq	27,500	14. Norway	25,000
15. Libya	26,500	15. People's Republic of China	25,000
16. People's Republic of China	25,000	16. United Arab Emirates(1)	20,000
17. Norway	24,700	17. Pakistan	16,400
18. Brunei-Malaysia	22,000	18. Indonesia	15,000
19. Indonesia	15,000	19. Malaysia	15,000
20. Mexico	15,000	20. Bolivia	10,800
Total Free World	1,700,404	Total Free World	1,413,897
Total World	2,546,404	Total World	2,248,897

(1) Prior to 1972 figures reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai and Sharjah which formed the United Arab Emirates.

Source: United States, American Gas Association, Committee on Natural Gas Reserves
Canada, Canadian Petroleum Association
Rest of the World, The Oil & Gas Journal, "World-Wide Oil" Issues

Section XIII
Table 7a

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1977		Nation	1978
1.	U.S.S.R.	918,000	1.	U.S.S.R	920,000
2.	Iran	330,000	2.	Iran	500,000
3.	United States	216,026	3.	United States	208,878
4.	Algeria	125,800	4.	Algeria	125,000
5.	Saudi Arabia	86,000	5.	Saudi Arabia	85,000
6.	Netherlands	61,900	6.	Netherlands	60,000
7.	Canada	58,282	7.	Canada	58,000
8.	Nigeria	44,000	8.	Nigeria	43,000
9.	Venezuela	40,700	9.	Venezuela	41,000
10.	Australia	32,300	10.	Qatar	40,000
11.	Kuwait	31,700	11.	Australia	32,000
12.	United Kingdom	30,000	12.	Kuwait	31,500
13.	Qatar	27,500	13.	Mexico	30,000
14.	Iraq	27,000	14.	United Kingdom	29,000
15.	Libya	25,800	15.	Iraq	28,000
16.	People's Republic of China	25,000	16.	Libya	25,700
17.	Indonesia	24,000	17.	People's Republic of China	25,000
18.	Norway	18,500	18.	Indonesia	24,000
19.	Pakistan	15,820	19.	United Arab Emirates	20,000
20.	Malaysia	15,000	20.	Norway	20,000
	Total Free World	1,161,905		Total Free World	1,563,437
	Total World	2,114,905		Total World	2,518,437

Source: United States, American Gas Association, Committee on Natural Gas Reserves
Canada, Canadian Petroleum Association
Rest of the World, The Oil & Gas Journal, "World-Wide Oil" Issues

Section XIII
Table 7b

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1979		Nation	1980
1.	U.S.S.R.	910,000	1.	U.S.S.R.	900,000
2.	Iran	500,000	2.	Iran	490,000
3.	United States	200,302	3.	United States	194,917
4.	Algeria	105,000	4.	Algeria	132,000
5.	Saudi Arabia	93,900	5.	Saudi Arabia	93,230
6.	Netherlands	62,000	6.	Canada	85,500
7.	Canada	59,000	7.	Qatar	60,000
8.	Nigeria	42,000	8.	Netherlands	59,500
9.	Venezuela	41,000	9.	Mexico	59,000
10.	Qatar	40,000	10.	Venezuela	42,800
11.	Mexico	32,000	11.	Nigeria	41,400
12.	Kuwait	31,300	12.	Kuwait	31,000
13.	Australia	31,000	13.	Australia	31,000
14.	Iraq	27,800	14.	Iraq	27,500
15.	United Kingdom	27,000	15.	United Kingdom	25,000
16.	People's Republic of China	25,000	16.	People's Republic of China	25,000
17.	Libya	24,200	17.	Libya	24,000
18.	Indonesia	24,000	18.	Indonesia	24,000
19.	Norway	24,000	19.	Norway	23,500
20.	United Arab Emirates	21,600	20.	United Arab Emirates	20,500
	Total Free World	1,552,312		Total Free World	1,639,158
	Total World	2,497,312		Total World	2,574,158

Source: United States, American Gas Association
Rest of World, Oil and Gas Journal

Section XIII
Table 7c

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1981	Nation	1982	Nation	1983
1. U.S.S.R.	920,000	1. U.S.S.R.	1,160,000	1. U.S.S.R.	1,240,000
2. Iran	485,000	2. Iran	484,000	2. Iran	482,600
3. United States	199,021	3. United States	201,730	3. United States	201,512
4. Algeria	131,500	4. Algeria	130,900	4. Saudi Arabia	117,000
5. Saudi Arabia	110,000	5. Saudi Arabia	114,000	5. Algeria	111,250
6. Canada	87,300	6. Canada	89,900	6. Canada	97,000
7. Mexico	64,500	7. Mexico	75,350	7. Mexico	75,850
8. Netherlands	62,000	8. Qatar	60,000	8. Qatar	62,000
9. Qatar	60,000	9. Netherlands	55,700	9. Norway	58,000
10. Norway	42,700	10. Norway	49,370	10. Venezuela	54,079
11. Venezuela	42,000	11. Venezuela	47,000	11. Netherlands	51,920
12. Nigeria	41,000	12. Nigeria	40,500	12. Malaysia	34,000
13. Kuwait	30,800	13. Kuwait	30,500	13. Nigeria	32,400
14 Australia	30,000	14. Indonesia	27,400	14. Kuwait	29,900
15. Iraq	27,450	15. Iraq	27,300	15. Indonesia	29,600
16. United Kingdom	24,800	16. United Kingdom	26,000	16. Iraq	28,800
17. People's Republic of China	24,500	17. People's Republic of China	24,400	17. United Kingdon	25,400
18. Libya	23,800	18. Argentina	23,400	18. Argentina	25,200
19. Indonesia	23,500	19. Libya	23,200	19. Libya	21,500
20. Argentina	22,000	20. Abu Dhabi	19,500	20. Abu Dhabi	19,260
Total Free World	1,692,622	Total Free World	1,720,376	Total Free World	1,747,239
Total World	2,646,522	Total World	2,915,076	Total World	3,031,039

Source: 1981-1983: United States, Department of Energy
Rest of World, Oil and Gas Journal

Section XIII
Table 7d

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1984	Nation	1985	Nation	1986
1. U.S.S.R.	1,400,000	1. U.S.S.R.	1,450,000	1. U.S.S.R.	1,500,000
2. Iran	480,000	2. Iran	478,600	2. Iran	470,000
3. United States	200,247	3. United States	197,463	3. United States	193,369
4. Saudi Arabia	121,000	4. Qatar	150,000	4. Qatar	148,000
5. Algeria	110,180	5. Saudi Arabia	123,270	5. Saudi Arabia	121,000
6. Canada	90,500	6. Algeria	109,100	6. Algeria	107,080
7. Mexico	75,352	7. Canada	92,300	7. Norway	104,000
8. Qatar	62,000	8. Norway	89,000	8. Canada	99,700
9. Norway	58,800	9. Mexico	77,000	9. Mexico	76,954
10. Venezuela	54,546	10. Netherlands	63,482	10. Netherlands	67,070
11. Netherlands	50,050	11. Venezuela	55,367	11. Venezuela	59,067
12. Malaysia	48,000	12. Malaysia	50,000	12. Malaysia	52,700
13. Nigeria	34,800	13. Indonesia	40,000	13. Nigeria	47,000
14. Kuwait	31,000	14. Nigeria	35,600	14. Indonesia	35,600
15. China	30,300	15. Kuwait	32,500	15. United Kingdom	33,000
16. Indonesia	30,200	16. China	30,900	16. Kuwait	32,500
17. Iraq	29,000	17. Iraq	28,800	17. China	30,000
18. United Kingdom	25,100	18. United Kingdom	27,800	18. Iraq	29,000
19. Argentina	24,420	19. Argentina	24,626	19. Argentina	23,588
20. Libya	21,350	20. Libya	21,200	20. Libya	21,390
TOTAL FREE WORLD	1,755,397	TOTAL FREE WORLD	1,904,088	TOTAL FREE WORLD	1,934,429
TOTAL WORLD	3,202,197	TOTAL WORLD	3,401,488	TOTAL WORLD	3,480,429

Source: 1984-1986: United States, U.S. Department of Energy
Rest of World, Oil and Gas Journal, "Worldwide Report" issue

Section XIII
Table 7~~e~~

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1987		Nation	1988		Nation	1989
1.	U.S.S.R.	1,550,000	1.	U.S.S.R.	1,450,000	1.	U.S.S.R.	1,500,000
2.	Iran	450,000	2.	Iran	489,400	2.	Iran	494,400
3.	United States	191,586	3.	United States	187,200	3.	United States	187,200
4.	Qatar	152,000	4.	Abu Dhabi	183,500	4.	Abu Dhabi	183,500
5.	Saudi Arabia	123,990	5.	Qatar	156,700	5.	Qatar	156,700
6.	Algeria	106,000	6.	Saudi Arabia	139,900	6.	Saudi Arabia	145,848
7.	Norway	103,180	7.	Norway	105,940	7.	Algeria	104,200
8.	Canada	99,600	8.	Algeria	105,900	8.	Venezuela	102,243
9.	Abu Dhabi	90,000	9.	Canada	98,000	9.	Canada	95,100
10.	Mexico	76,500	10.	Venezuela	95,000	10.	Iraq	95,000
11.	Netherlands	70,400	11.	Nigeria	84,000	11.	Norway	85,500
12.	Venezuela	59,000	12.	Mexico	76,530	12.	Nigeria	85,000
13.	Malaysia	49,440	13.	Indonesia	73,000	13.	Indonesia	83,590
14.	Indonesia	49,440	14.	Netherlands	64,100	14.	Mexico	74,831
15.	Nigeria	47,000	15.	Malaysia	52,200	15.	Netherlands	62,507
16.	Kuwait	35,000	16.	Kuwait	36,400	16.	Malaysia	51,700
17.	United Kingdom	33,400	17.	China	30,700	17.	Kuwait	42,500
18.	China	30,000	18.	Iraq	26,300	18.	China	31,700
19.	Iraq	28,000	19.	Libya	25,700	19.	Argentina	26,700
20.	Argentina	23,000	20.	Argentina	23,600	20.	Libya	25,700
	TOTAL FREE WORLD	2,036,366		TOTAL FREE WORLD	2,287,500		TOTAL FREE WORLD	2,394,641
	TOTAL WORLD	3,632,166		TOTAL WORLD	3,797,500		TOTAL WORLD	3,955,341

Source: U.S.--D.O.E./E.I.A., U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.
Rest of World--Oil and Gas Journal, "Worldwide Report" issue

Section XIII
Table 7d

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1984	Nation	1985	Nation	1986
1. U.S.S.R.	1,400,000	1. U.S.S.R.	1,450,000	1. U.S.S.R.	1,500,000
2. Iran	480,000	2. Iran	478,600	2. Iran	470,000
3. United States	200,247	3. United States	197,463	3. United States	193,369
4. Saudi Arabia	121,000	4. Qatar	150,000	4. Qatar	148,000
5. Algeria	110,180	5. Saudi Arabia	123,270	5. Saudi Arabia	121,000
6. Canada	90,500	6. Algeria	109,100	6. Algeria	107,080
7. Mexico	75,352	7. Canada	92,300	7. Norway	104,000
8. Qatar	62,000	8. Norway	89,000	8. Canada	99,700
9. Norway	58,800	9. Mexico	77,000	9. Mexico	76,954
10. Venezuela	54,546	10. Netherlands	68,482	10. Netherlands	67,070
11. Netherlands	50,050	11. Venezuela	55,367	11. Venezuela	59,067
12. Malaysia	48,000	12. Malaysia	50,000	12. Malaysia	52,700
13. Nigeria	34,800	13. Indonesia	40,000	13. Nigeria	47,000
14. Kuwait	31,000	14. Nigeria	35,600	14. Indonesia	35,600
15. China	30,300	15. Kuwait	32,500	15. United Kingdom	33,000
16. Indonesia	30,200	16. China	30,900	16. Kuwait	32,500
17. Iraq	29,000	17. Iraq	28,800	17. China	30,000
18. United Kingdom	25,100	18. United Kingdom	27,800	18. Iraq	29,000
19. Argentina	24,420	19. Argentina	24,628	19. Argentina	23,588
20. Libya	21,350	20. Libya	21,200	20. Libya	21,390
TOTAL FREE WORLD	1,755,397	TOTAL FREE WORLD	1,904,088	TOTAL FREE WORLD	1,934,429
TOTAL WORLD	3,202,197	TOTAL WORLD	3,401,488	TOTAL WORLD	3,480,429

Source: 1984-1986: United States, U.S. Department of Energy
Rest of World, Oil and Gas Journal, "Worldwide Report" issue

Section XIII
Table 8

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1974(1)(2)	Nation	1975(1)(2)	Nation	1976(1)(2)
1. United States	21,600.5	1. United States	20,108.7	1. United States	19,952.4
2. U.S.S.R.	9,201.3	2. U.S.S.R.	10,205.9	2. U.S.S.R.	11,331.3
3. Canada	3,045.5	3. Netherlands	3,208.4	3. Netherlands	3,542.7
4. Netherlands	2,956.7	4. Canada	3,075.7	4. Canada	3,157.2
5. United Kingdom	1,230.0	5. People's Republic of China	1,400.0	5. Iran	1,699.6
6. People's Republic of China	1,200.0	6. United Kingdom	1,208.2	6. People's Republic of China	1,433.7
7. Romania	1,011.5	7. Romania	953.5	7. United Kingdom	1,202.3
8. Iran	787.4	8. Iran	771.1	8. Romania	854.6
9. West Germany	713.2	9. West Germany	639.4	9. Mexico	790.8
10. Mexico	560.9	10. Mexico	583.9	10. Nigeria	632.6
11. Italy	540.4	11. Italy	514.3	11. Italy	562.1
12. Venezuela	476.0	12. Venezuela	450.3	12. West Germany	544.0
13. Libya	345.2	13. Libya	382.6	13. Libya	439.2
14. East Germany	273.1	14. East Germany	280.0	14. Venezuela	396.0
15. France	269.4	15. Argentina	271.6	15. Argentina	280.2
16. Argentina	255.7	16. France	259.8	16. Algeria	256.9
17. Saudi Arabia	219.0	17. Poland	210.6	17. France	250.7
18. Poland	202.7	18. Algeria	210.0	18. Indonesia	248.6
19. Algeria	198.5	19. Saudi Arabia	200.0	19. Australia	209.3
20. Kuwait	186.9	20. Brunei	186.5	20. Chile	175.8
Total Free World	35,054.2	Total Free World	33,931.1	Total Free World	36,006.5
Total World	47,171.5	Total World	47,207.3	Total World	50,367.1

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(1) Comprises all gas collected and utilized as fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: 1974-1975: U.S. Bureau of Mines, World Natural Gas, May 27, 1977
1976: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1977(1)(2)	Nation	1978(1)(2)	Nation	1979(1)(2)
1. United States	20,337.5	1. United States	19,974.0	1. United States	20,471.3
2. U.S.S.R.	12,395.2	2. U.S.S.R.	13,131.6	2. U.S.S.R.	14,367.1
3. Canada	3,301.4	3. Canada	3,133.1	3. Canada	3,646.5
4. Netherlands	2,932.5	4. People's Republic of China	2,352.2	4. People's Republic of China	2,832.7
5. People's Republic of China	1,787.0	5. Iran	1,746.9	5. Netherlands	2,717.8
6. Iran	1,756.1	6. Netherlands	1,624.5	6. United Kingdom	1,965.7
7. United Kingdom	1,499.9	7. United Kingdom	1,262.4	7. Romania	1,210.5
8. Romania	1,005.5	8. Romania	1,211.6	8. Mexico	974.9
9. West Germany	907.7	9. Mexico	887.5	9. Iran	913.3
10. Mexico	745.3	10. West Germany	643.2	10. West Germany	826.3
11. Nigeria	717.4	11. Nigeria	586.6	11. Indonesia	816.3
12. Libya	488.6	12. Indonesia	565.8	12. Italy	533.6
13. Italy	448.6	13. Italy	540.8	13. Norway	414.9
14. Venezuela	392.8	14. Venezuela	401.4	14. Venezuela	406.0
15. Indonesia	351.9	15. Libya	364.0	15. Nigeria	365.6
16. Algeria	284.5	16. Norway	351.8	16. Chile	306.4
17. France	256.8	17. Algeria	328.7	17. Brunei-Malaysia	302.7
18. Argentina	250.0	18. Brunei-Malaysia	325.7	18. Algeria	301.5
19. Australia	236.7	19. Chile	320.7	19. Australia	254.1
20. Chile	208.9	20. Argentina	254.3	20. Argentina	241.7
Total Free World	35,393.2	Total Free World	35,272.8	Total Free World	38,075.1
Total World	53,883.7	Total World	53,911.1	Total World	57,666.5

(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1980(1)(2)	Nation	1981(1)(2)	Nation	1982(1)(2)
1. United States	20,378.8	1. United States	20,177.7	1. United States	18,519.7
2. U.S.S.R.	15,355.5	2. U.S.S.R.	16,390.0	2. U.S.S.R.	17,685.3
3. People's Republic		3. Netherlands	3,054.0	3. Canada	2,546.1
of China	3,469.0	4. Canada	2,623.0	4. Netherlands	2,521.7
4. Netherlands	2,799.6	5. Mexico	1,486.0	5. Mexico	1,549.7
5. Canada	2,668.3				
6. United Kingdom	1,500.0	6. Romania	1,440.0	6. United Kingdom	1,276.1
7. Mexico	1,190.5	7. United Kingdom	1,427.0	7. Romania	1,150.0
8. Romania	1,176.4	8. Algeria	1,149.0	8. Norway	861.9
9. Indonesia	1,028.4	9. Indonesia	1,075.0	9. Algeria	828.5
10. West Germany	738.6	10. Norway	923.0	10. Saudi Arabia	591.8
11. Norway	705.2	11. Libya	674.0	11. West Germany	585.3
12. Pakistan	600.0	12. West Germany	636.0	12. Indonesia	568.9
13. Italy	524.6	13. Venezuela	602.0	13. Venezuela	527.2
14. Venezuela	518.0	14. Pakistan	600.0	14. Italy	503.6
15. Algeria	517.0	15. Italy	500.0	15. Australia	415.8
16. Saudi Arabia	310.2	16. People's Republic		16. Argentina	386.2
17. Argentina	296.9	of China	459.0	17. Iran	381.5
18. Iran	292.0	17. Saudi Arabia	435.0	18. China	363.7
19. Kuwait	291.3	18. Australia	377.0	19. France	332.6
20. Brunei	282.0	19. Kuwait	340.0	20. Pakistan	315.3
		20. Argentina	330.0		
Total Free World	37,677.7	Total Free World	39,187.7	Total Free World	35,424.6
Total World	58,747.7	Total World	58,397.7	Total World	55,682.6

(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

Section XIII
Table 8c

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1983(1)(2)	Nation	1984(1)(2)	Nation	1985(1)(2)
1. U.S.S.R.	18,903.0	1. U.S.S.R.	20,721.1	1. U.S.S.R.	22,697.9
2. United States	16,822.1	2. United States	18,229.6	2. United States	17,198.0
3. Netherlands	2,678.9	3. Netherlands	2,677.5	3. Canada	3,350.6
4. Canada	2,414.1	4. Canada	2,651.8	4. Netherlands	2,858.8
5. Mexico	1,479.5	5. United Kingdom	1,423.3	5. United Kingdom	1,497.1
6. United Kingdom	1,395.3	6. Mexico	1,373.3	6. Algeria	1,320.0
7. Romania	1,200.0	7. Algeria	1,260.0	7. Mexico	1,312.2
8. Norway	861.4	8. Romania	1,240.0	8. Romania	1,200.0
9. Algeria	707.0	9. Norway	922.6	9. Indonesia	1,056.0
10. West Germany	605.2	10. Indonesia	732.0	10. Norway	902.2
11. Venezuela	559.2	11. Argentina	653.2	11. Argentina	667.3
12 Argentina	549.6	12. West Germany	648.2	12. Venezuela	609.6
13. Iran	500.2	13. Italy	638.9	13. West Germany	608.1
14 Indonesia	481.8	14. Venezuela	609.6	14. China	600.0
15. Italy	450.1	15. Australia	444.4	15. Iran	480.0
16. Australia	423.5	16. China	420.0	16. Australia	473.7
17 Saudi Arabia	381.5	17. France	373.4	17. Italy	448.9
18. China	371.0	18. Iran	360.0	18. Pakistan	355.3
19. Pakistan	341.4	19. Pakistan	355.2	19. United Arab Emirates	336.0
20. Brunei	316.3	20. Brunei	312.0	20. Brunei	300.0
Total Free World	33,924.6	Total Free World	36,821.8	Total Free World	36,990.3
Total World	55,307.6	Total World	60,093.9	Total World	62,443.7

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(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

Section XIII
Table 8d

WORLD NATURAL GAS PRODUCTION--TWENTY LEADING NATIONS
(Billions of Cubic Feet)

	Nation	1986(1)(2)		Nation	1987(1)(2)
1.	U.S.S.R.	24,215.8	1.	U.S.S.R.	25,673.8
2.	United States	16,791.0	2.	United States	17,150.0
3.	Canada	3,168.3	3.	Canada	3,472.7
4.	Netherlands	2,623.3	4.	Netherlands	2,731.2
5.	United Kingdom	1,634.0	5.	United Kingdom	1,655.3
6.	Mexico	1,252.3	6.	Algeria	1,471.6
7.	Algeria	1,238.3	7.	Mexico	1,277.4
8.	Romania	1,210.2	8.	Romania	1,267.8
9.	Indonesia	1,559.9	9.	Indonesia	1,234.8
10.	Norway	906.2	10.	Norway	994.1
11.	Argentina	661.8	11.	Saudi Arabia	740.9
12.	China	646.0	12.	Italy	697.2
13.	Venezuela	615.1	13.	Venezuela	680.3
14.	West Germany	545.4	14.	Iran	670.7
15.	Italy	527.3	15.	Argentina	659.6
16.	Australia	524.1	16.	West Germany	658.9
17.	Iran	489.3	17.	United Arab Emirates	575.0
18.	Pakistan	390.3	18.	Australia	532.8
19.	United Arab Emirates	362.1	19.	Malaysia	460.9
20	Saudi Arabia	328.7	20.	Pakistan	419.8
Total Free World		36,698.0	Total Free World		39,468.5
Total World		63,786.2	Total World		68,211.0

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(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; Other nations, Oil and Gas Journal.

Section XIII
Table 9

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
AL	-	-	-	2	1	4	41	87	282	42	190	323
AK	-	-	-	-	-	-	-	-	-	--	--	50
AZ	-	-	-	-	-	-	-	-	15	21	--	--
AR	50,630	53,946	47,788	48,047	44,656	42,325	41,510	33,471	32,123	30,162	31,327	32,890
CA	560,510	570,954	550,903	558,398	566,751	517,450	531,346	507,289	538,178	504,458	492,338	465,582
CO	8,392	8,967	8,490	11,168	14,128	34,260	28,509	45,705	49,152	54,205	95,259	82,464
FL	8	27	39	8	10	15	34	35	36	35	34	35
IL	17,023	14,062	12,391	13,285	11,425	10,183	9,282	9,475	8,033	6,177	9,647	12,983
IN	877	553	334	956	845	836	701	735	1,226	791	671	378
KS	209,321	245,189	294,078	364,024	417,538	412,544	420,607	412,369	471,041	526,091	586,690	561,816
KY	96,459	70,095	51,851	73,316	76,097	73,427	71,405	72,713	73,214	73,687	70,024	72,248
LA	581,398	686,061	732,845	831,771	1,054,199	1,237,143	1,293,644	1,399,222	1,680,032	1,886,302	2,078,901	2,451,587
MD	-	-	-	373	3,422	2,372	1,408	1,394	3,116	4,619	4,649	4,266
MI	18,812	14,981	14,753	11,250	11,194	9,052	7,774	6,962	8,300	10,911	9,122	14,243
MS	40,037	59,899	68,062	114,153	158,845	174,100	154,254	140,448	163,167	185,137	169,967	160,143
MO	38	27	24	21	14	16	15	16	15	12	12	-
MT	34,282	36,551	35,291	39,186	36,424	28,714	27,889	30,252	28,255	25,847	28,638	27,989
NE	-	-	-	17	3,895	5,568	6,748	6,801	12,515	13,541	14,249	11,405
NM	142,740	194,749	204,961	212,909	300,169	359,377	399,086	449,346	540,664	626,340	723 004	761,446
NY	4,600	4,705	3,693	3,336	3,214	3,627	2,347	2,590	3,637	4,098	2,869	2,808
ND	442	643	533	608	456	369	498	1,093	5,256	11,725	15,450	17,325
OH	68,946	65,619	46,512	43,163	38,879	30,993	37,542	28,824	33,756	25,368	30,384	31,786
OK	419,010	480,573	435,262	482,360	538,756	554,033	599,955	616,355	614,976	678,603	719,794	696,504
PA	91,971	87,578	84,739	91,137	128,715	108,684	105,558	145,934	99,172	104,508	101,801	95,869
SD	6	2	1	-	7	6	5	7	-	-	-	-
TN	80	127	83	132	132	107	89	89	39	45	38	54
TX	1,992,704	2,289,923	2,588,921	3,126,402	3,781,136	4,147,805	4,383,158	4,551,232	4,730,798	4,999,889	5,156,215	5,178,073
UT	6,040	6,610	6,126	3,950	3,733	3,006	7,075	16,024	17,163	17,268	16,824	19,247
VA	64	74	65	46	64	1,133	3,697	1,401	968	2,926	2,465	2,521
WV	192,233	203,681	181,176	189,980	191,146	180,995	186,477	191,601	212,403	204,717	202,440	204,581
WY	45,550	52,424	50,815	62,062	71,508	75,313	76,262	71,068	77,819	84,398	117,256	121,682
TOT	4,582,173	5,148,020	5,419,736	6,282,060	7,457,359	8,013,457	8,396,916	8,742,546	9,405,351	10,081,923	10,680,258	11,030,298

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 9a

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

State	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
AL	172	57	56	128	177	165	203	252	248	230	180	627
AK	133	246	631	2,184	4,498	6,238	7,255	11,267	14,438	17,343	50,864	111,576
AZ	-	-	-	230	1,334	2,014	3,106	3,161	1,255	881	1,136	1,101
AR	40,674	55,451	59,547	66,213	76,101	75,753	82,831	105,174	116,522	156,627	169,257	181,351
CA	485,655	517,535	556,241	564,220	646,486	660,444	660,384	689,607	681,080	714,893	677,689	649,117
CO	99,899	107,404	108,142	101,826	105,705	113,691	126,381	136,667	116,857	121,424	118,754	105,804
FL	34	30	29	29	35	40	107	212	123	108	50	--
IL	13,739	11,666	9,970	10,650	9,459	7,824	7,396	7,230	5,144	4,380	3,800	4,850
IN	484	342	382	284	286	199	239	215	198	234	171	153
KS	604,410	634,410	649,083	694,352	732,946	764,073	793,379	847,495	871,971	835,555	883,156	899,955
KY	73,504	75,329	70,937	70,241	74,634	76,940	78,976	76,536	89,168	89,024	81,304	77,892
LA	2,670,271	2,988,414	3,271,857	3,525,456	3,928,427	4,152,731	4,466,786	5,081,435	5,716,857	6,416,015	7,227,826	7,788,276
MD	4,373	4,065	3,578	2,472	1,633	1,373	408	696	621	864	978	813
MI	18,916	20,790	27,697	28,987	32,850	31,388	34,558	34,120	33,589	40,480	36,163	38,851
MS	162,095	172,478	172,543	170,271	176,807	180,428	166,825	156,652	139,497	135,051	131,234	126,031
MO	-	75	90	92	100	107	84	-	121	14	126	87
MT	30,743	33,418	33,901	29,955	30,026	25,051	28,105	30,685	25,866	19,313	41,229	42,705
NE	13,128	15,258	15,743	14,880	13,051	11,094	10,720	10,196	8,453	8,129	6,989	5,991
NM	739,660	798,928	789,662	804,612	808,377	873,947	937,205	998,076	1,067,510	1,164,182	1,138,133	1,138,980
NY	2,915	4,990	5,742	4,262	3,962	3,108	3,340	2,699	3,837	4,632	4,861	3,358
ND	17,915	19,483	20,100	25,155	32,798	34,512	35,652	46,585	40,462	41,023	33,587	34,889
OH	34,664	36,074	36,423	36,747	36,817	37,106	35,684	43,133	41,315	42,673	49,793	52,113
OK	811,508	824,266	892,697	1,060,717	1,233,883	1,316,201	1,320,995	1,351,225	1,412,952	1,390,884	1,523,715	1,594,943
PA	99,366	113,928	100,427	90,053	92,657	81,720	84,461	90,914	89,966	87,987	79,134	76,841
SD	-	-	-	-	-	-	-	-	-	-	-	-
TN	52	63	71	75	90	77	85	-	58	48	57	64
TX	5,718,993	5,892,704	5,963,605	6,080,210	6,205,034	6,490,202	6,636,555	6,953,790	7,188,900	7,495,414	7,853,199	8,357,716
UT	38,921	51,040	57,175	74,128	77,122	79,739	71,616	69,366	48,965	46,151	46,733	42,781
VA	2,280	2,227	2,466	2,499	2,085	1,600	3,152	4,249	3,818	3,389	2,846	2,805
WV	204,633	208,757	210,556	210,698	210,223	202,765	207,416	211,610	211,460	236,971	231,759	242,452
WY	156,978	181,610	194,674	204,996	209,060	231,613	235,849	243,381	240,074	248,481	303,517	338,520
TOT	12,046,115	12,771,038	13,254,025	13,876,622	14,746,663	15,462,143	16,039,753	17,206,628	18,171,325	19,322,400	20,698,240	21,920,642

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 9b

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
AL	355	3,644	11,271	27,865	37,814	41,427	57,227	85,599	85,815	105,527	119,334	75,003
AK	121,618	125,596	131,007	128,935	160,270	166,072	187,889	203,088	220,754	230,588	242,564	264,364
AZ	868	442	125	224	208	262	240	286	247	214	187	99
AR	172,154	166,522	157,529	123,975	116,237	109,533	104,096	106,792	109,452	111,808	92,986	124,611
CA	612,629	487,278	449,369	365,354	318,308	354,334	311,462	311,084	248,206	309,783	380,730	383,977
CO	108,537	116,949	137,725	144,629	171,629	183,972	188,792	183,693	191,239	190,814	199,146	209,892
FL	903	15,521	33,857	38,137	44,383	43,165	48,171	51,595	50,190	45,744	35,938	22,515
IL	498	1,194	1,638	1,436	1,440	1,556	1,003	1,159	1,585	1,574	1,295	1,162
IN	537	355	276	176	346	192	183	163	350	463	330	233
KS	885,144	889,268	893,118	886,782	843,625	829,170	781,289	854,484	797,762	735,035	640,114	429,597
KY	72,723	63,648	62,396	71,876	60,511	66,137	60,902	70,044	59,520	57,180	61,312	51,924
LA	8,081,907	7,972,678	8,242,423	7,753,631	7,090,645	7,006,596	7,215,006	7,476,497	7,266,217	6,939,924	6,780,184	6,171,627
MD	214	244	298	133	93	75	82	88	28	68	56	36
MI	25,662	34,221	44,579	69,133	102,113	119,262	129,954	148,047	159,731	158,302	152,593	153,051
MS	118,805	103,989	99,706	78,787	74,345	70,762	82,995	106,579	144,077	185,469	211,371	167,231
MO	22	9	33	33	30	29	20	-	-	-	-	-
MT	32,720	33,474	56,175	54,873	40,734	42,563	46,819	46,522	53,888	51,867	56,565	56,517
NE	3,496	3,478	3,836	2,538	2,565	2,511	2,789	2,882	3,208	2,550	2,519	2,280
NM	1,167,577	1,216,061	1,218,749	1,244,779	1,217,430	1,230,976	1,202,973	1,174,198	1,181,363	1,149,781	1,134,113	991,178
NY	2,202	3,679	4,539	4,990	7,628	9,235	10,682	13,900	15,500	15,643	16,074	15,877
ND	33,864	32,472	27,703	31,206	24,786	31,470	29,173	30,499	18,468	42,346	42,573	53,818
OH	79,903	89,995	93,610	92,055	84,960	88,891	99,327	114,098	123,481	138,856	141,134	138,391
OK	1,684,260	1,806,887	1,770,980	1,638,942	1,605,410	1,726,513	1,769,519	1,773,582	1,835,366	1,891,824	2,019,199	1,934,412
OR	-	-	-	-	-	-	-	-	2	5	5	3
PA	76,451	73,958	78,514	82,637	84,676	89,386	91,717	97,763	96,313	97,439	122,454	121,111
SD	-	-	-	-	-	-	-	-	914	1,193	1,155	2,311
TN	89	25	20	17	27	47	263	468	941	1,241	1,719	2,976
TX	8,550,705	8,657,840	8,513,850	8,170,798	7,485,764	7,191,859	7,051,027	6,548,184	7,174,623	7,251,879	7,050,207	6,468,817
UT	42,418	39,474	42,715	50,522	55,354	57,416	60,696	58,416	58,605	87,766	91,191	94,255
VA	2,619	2,787	5,101	7,096	6,723	6,937	8,220	8,492	8,544	7,812	8,903	6,880
WV	234,027	214,951	208,676	202,306	154,484	153,322	152,767	148,564	150,505	156,551	161,251	150,850
WY	380,105	375,059	357,731	326,657	316,123	328,768	330,180	357,267	414,416	409,541	410,499	424,657
TOT	22,493,012	22,531,698	22,647,549	21,600,522	20,108,661	19,952,438	20,025,463	19,974,033	20,471,260	20,378,787	20,177,701	18,519,675

(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Energy Information Administration, Natural Gas Annuals

Section XIII
Table 9c

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1983	1984	1985	1986	1987
Alabama	90,801	101,821	107,342	107,184	117,241
Alaska	276,691	289,129	321,346	302,841	359,837
Arizona	132	45	85	63	60
Arkansas	127,561	135,161	155,099	131,075	141,151
California	415,324	476,333	491,283	462,218	424,621
Colorado	163,545	173,257	178,233	163,684	164,557
Florida	21,056	12,585	10,545	8,833	8,281
Illinois	1,030	1,530	1,324	1,887	1,371
Indiana	135	392	367	365	217
Kansas	434.736	465,979	512,872	465,695	457,050
Kentucky	46,720	61,518	73,126	80,195	70,125
Louisiana	5,332,113	5,825,055	5,012,702	4,895,394	5,122,509
Maryland	31	60	39	20	44
Michigan	138,910	144,537	131,855	127,287	146,996
Mississippi	151,204	157,911	144,172	140,833	139,727
Missouri	0	4	4	4	4
Montana	51,967	51,474	52,494	46,592	46,456
Nebraska	2,091	2,300	1,944	1,403	1,261
New Mexico	895,279	957,366	905,272	702,614	823,773
New York	17,836	25,200	31,561	29,964	25,676
North Dakota	69,319	70,496	72,633	55,098	62,258
Ohio	151,300	186,480	182,245	182,072	166,593
Oklahoma	1,730,061	1,985,869	1,936,341	1,917,493	2,004,797
Oregon	3	2,790	4,080	4,600	3,800
Pennsylvania	118,372	166,342	150,234	159,889	163,318
South Dakota	1,846	1,947	2,558	2,231	3,431
Tennessee	3,950	5,022	4,686	3,464	2,707
Texas	5,938,561	6,185,021	6,052,663	6,151,775	6,126,315
Utah	63,158	74,698	83,405	90,013	87,158
Virginia	4,346	8,901	15,041	15,427	19,223
West Virginia	130,178	143,730	144,883	135,431	160,000
Wyoming	443,988	516,683	416,565	403,266	497,980
TOTAL	16,822,144	18,229,638	17,197,999	16,790,910	17,348,537

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
AL	50,713	61,113	71,072	92,466	111,030	125,874	136,825	139,551	151,325	160,261	165,772	172,406
AK	-	-	-	-	-	-	-	-	-	-	-	-
AZ	27,768	34,983	44,489	53,419	62,046	63,111	71,210	75,568	88,983	105,860	105,536	105,034
AR	102,779	112,675	113,922	135,609	155,524	165,603	176,489	192,378	197,374	196,297	201,306	202,361
CA	548,382	617,615	619,323	683,924	787,848	792,520	862,243	933,934	1,020,395	1,021,002	1,091,236	1,078,855
CO	49,027	60,585	73,664	88,692	102,769	101,835	115,922	126,048	143,018	145,640	176,936	165,099
CT	-	-	-	-	-	1,039	5,833	11,415	14,187	18,109	20,328	27,884
DE	-	-	708	1,022	1,679	2,276	1,972	2,980	4,280	5,824	6,014	8,301
DC	8,474	9,361	9,305	10,694	11,904	12,782	13,134	14,261	15,042	15,833	15,701	17,594
FL	7,891	8,973	10,185	12,348	13,044	16,001	19,577	23,159	26,402	35,322	38,871	44,174
GA	41,368	47,552	58,824	67,894	94,596	108,329	122,742	132,069	133,044	148,567	154,778	164,114
ID	-	-	-	-	-	-	-	-	-	765	10,733	15,903
IL	132,153	168,796	202,546	235,211	250,812	344,705	350,980	391,408	398,718	417,443	422,840	452,006
IN	42,528	50,774	55,263	58,620	69,177	96,124	103,444	116,308	126,897	140,135	145,179	154,583
IA	40,948	50,350	57,620	66,233	79,640	94,951	106,755	119,876	138,661	147,892	154,964	159,982
KS	191,952	199,893	206,593	242,603	278,892	279,632	283,604	293,784	309,028	324,335	343,833	362,280
KY	36,938	41,357	45,504	61,323	74,386	87,006	104,781	110,039	117,496	126,580	132,436	136,990
LA	375,206	426,837	450,712	475,500	549,305	599,312	594,656	636,704	774,320	839,393	840,331	931,203
ME	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
MD	3,402	4,280	4,821	13,813	22,286	26,468	29,470	35,010	39,889	47,553	51,177	57,328
MA	-	-	-	-	1,783	11,386	17,683	35,486	43,932	50,691	56,626	67,602
MI	80,571	75,978	84,315	127,180	154,283	163,991	178,307	188,922	207,005	243,465	272,353	298,104
MN	43,198	52,376	59,040	67,861	84,205	97,591	104,508	115,140	123,734	136,831	147,732	149,042
MS	52,461	65,245	60,987	76,918	97,786	119,638	118,617	136,797	138,186	145,353	148,279	157,169
MO	78,101	90,883	99,667	140,384	156,922	168,992	173,674	188,349	199,272	219,424	223,528	241,239
MT	30,919	32,919	34,361	38,544	37,481	40,771	39,934	40,624	47,491	47,690	52,200	51,825
NE	39,699	47,647	51,911	61,742	72,386	78,544	83,384	93,189	102,177	109,265	116,326	114,661
NV	-	-	-	-	-	-	-	982	2,484	6,676	8,666	8,826
NH	-	-	-	-	3	316	857	1,065	1,206	1,445	1,787	2,421
NJ	-	-	3,172	3,209	30,887	40,409	58,685	65,718	74,601	90,092	100,483	119,946
NM	102,766	110,132	127,423	147,509	174,808	194,748	200,039	177,221	215,281	229,821	243,800	251,518
NY	41,572	44,200	51,064	65,157	144,920	180,747	197,878	225,844	243,513	268,408	299,153	343,326
NC	-	-	-	-	1,631	2,945	6,172	9,436	12,644	16,579	19,533	23,519
ND	2,608	2,712	2,686	3,279	3,408	3,342	3,559	4,820	9,320	10,428	13,753	15,639
OH	221,571	236,137	246,212	324,594	375,820	393,250	420,809	442,523	500,865	561,557	583,753	618,022
OK	254,522	277,955	258,579	286,793	307,887	319,908	333,972	327,936	334,057	358,930	387,277	342,080
OR	-	-	-	-	-	-	-	-	-	4,473	18,227	22,752
PA	175,906	191,631	209,749	263,199	311,937	324,187	335,457	353,185	390,280	431,325	445,813	465,732
RI	-	-	-	-	-	-	670	4,423	5,375	6,242	8,139	9,940
SC	-	-	-	-	853	2,896	8,772	16,573	23,043	44,467	39,741	39,678
SD	8,016	8,540	8,212	10,001	11,447	11,701	13,688	15,564	16,107	18,002	18,251	19,535
TN	33,986	37,766	41,609	67,813	88,078	99,817	106,130	114,869	118,052	126,815	130,601	142,860
TX	1,444,422	1,605,955	1,658,379	1,824,553	2,130,377	2,175,100	2,194,172	2,198,175	2,236,540	2,323,847	2,455,528	2,555,541
UT	20,919	21,627	24,338	26,368	29,014	30,929	34,592	41,073	48,903	54,669	57,004	55,706
VT	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
VA	3,055	3,877	4,324	7,639	14,853	18,630	27,716	35,604	38,884	43,362	48,527	56,052
WA	-	-	-	-	-	-	-	-	-	5,224	40,108	53,063
WV	106,105	112,702	111,802	132,273	139,608	146,153	148,017	138,846	158,006	161,246	159,520	164,347
WI	267	323	1,696	15,380	28,382	33,632	36,339	39,287	40,621	48,188	59,592	67,596
WY	26,351	31,400	31,407	36,637	38,865	36,287	36,070	36,709	39,705	45,552	45,504	46,810
TOT	4,426,544	4,945,149	5,195,484	6,026,404	7,102,562	7,613,478	7,979,338	8,402,852	9,070,343	9,706,878	10,279,775	10,760,648

(1) Included with New Hampshire.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 10a

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
AL	178,595	184,118	184,909	194,369	205,763	222,047	229,152	233,098	254,176	287,212	300,892	298,497
AK	133	229	557	2,137	4,214	5,781	6,922	10,784	11,889	17,548	42,726	63,726
AZ	112,722	135,494	153,674	157,892	157,494	162,570	154,489	162,320	158,766	176,547	195,476	192,996
AR	218,528	216,516	209,420	224,744	251,129	273,671	281,825	295,078	295,460	321,569	349,990	381,951
CA	1,180,331	1,311,253	1,405,882	1,476,322	1,554,126	1,737,341	1,757,292	1,884,878	1,911,132	2,046,080	2,048,534	2,126,466
CO	196,057	207,464	212,611	204,940	207,663	236,325	236,745	233,896	231,508	256,820	272,437	282,328
CT	25,875	28,453	30,361	32,227	34,809	37,502	40,822	47,695	49,780	53,202	57,485	60,574
DE	9,459	9,035	9,380	14,492	16,378	17,091	17,969	19,045	21,063	24,059	25,863	26,421
DC	17,123	18,142	18,518	19,338	19,359	20,633	21,210	(2)	(2)	(2)	(2)	(2)
FL	91,490	137,875	143,656	157,735	177,496	185,249	188,389	212,278	225,531	273,524	311,885	336,816
GA	180,342	182,087	179,957	192,638	187,600	206,691	211,321	233,291	254,334	283,115	311,543	332,526
ID	19,641	22,006	23,969	25,806	26,635	30,825	33,889	36,104	34,283	39,479	41,436	46,570
IL	518,111	536,549	574,346	620,309	658,432	731,921	772,092	854,149	948,353	994,404	1,085,392	1,173,878
IN	171,158	212,851	239,932	272,309	297,897	333,718	357,882	399,905	434,632	454,013	530,981	545,368
IA	182,827	187,138	204,663	213,552	219,005	243,634	247,513	239,478	272,850	297,498	318,341	348,662
KS	380,241	372,302	364,957	380,055	387,880	433,429	464,337	507,704	450,963	496,550	547,227	575,694
KY	147,993	159,710	161,912	168,138	175,928	185,780	182,828	160,392	192,464	196,807	234,882	248,048
LA	893,369	947,938	1,036,887	1,007,041	1,070,471	1,139,186	1,155,260	1,258,776	1,394,376	1,521,492	1,762,955	1,840,840
ME	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
MD	60,674	64,923	68,390	76,551	81,774	86,813	93,957	117,208	139,853	149,125	168,944	182,135
MA	72,994	77,886	81,768	89,015	98,447	106,699	114,227	116,198	128,217	132,325	136,988	147,307
MI	332,756	368,531	407,732	443,677	463,667	500,628	558,240	619,863	686,095	700,538	776,573	809,124
MN	161,390	179,827	192,584	214,130	219,047	236,976	248,741	264,488	283,086	311,898	325,687	342,322
MS	183,158	188,864	190,930	199,733	227,184	252,023	249,845	286,390	282,160	312,891	326,165	360,382
MO	255,095	261,372	274,487	289,482	303,075	325,194	341,144	351,768	360,703	365,546	398,697	429,526
MT	52,183	54,569	57,781	63,298	67,337	67,652	70,895	73,829	65,038	62,898	78,283	87,791
NE	132,651	139,028	143,169	146,043	149,014	164,224	168,032	198,592	188,661	203,345	210,033	222,335
NV	10,450	12,447	15,864	17,528	19,292	23,928	27,679	34,218	35,035	37,029	44,140	52,558
NH	2,480	2,852	3,018	3,315	3,596	3,813	4,084	5,567	6,578	6,630	9,196	10,691
NJ	132,984	139,258	153,806	174,210	188,249	200,109	209,757	227,271	251,482	268,495	304,835	322,853
NM	272,922	266,409	288,455	292,495	275,969	257,173	263,798	261,918	255,590	260,774	251,905	270,103
NY	379,928	419,460	435,417	474,384	506,942	513,828	544,414	631,808	589,120	639,845	683,688	710,885
NC	32,685	45,442	50,523	56,373	62,296	68,533	75,745	86,753	97,981	114,809	136,651	151,227
ND	16,981	17,274	19,625	22,196	23,765	26,232	30,318	40,836	31,858	33,053	32,682	32,717
OH	670,618	698,569	719,674	756,398	797,318	824,111	879,639	944,767	962,821	987,841	1,031,963	1,052,933
OK	379,178	383,042	378,096	485,726	588,245	598,631	524,404	490,032	449,378	496,465	546,191	597,196
OR	27,498	30,861	33,827	37,865	43,350	53,984	56,065	65,093	69,877	79,226	87,854	95,284
PA	502,066	520,788	529,716	550,080	585,426	607,277	629,485	677,111	678,478	717,909	765,941	772,388
RI	11,011	11,839	12,780	13,794	14,725	15,465	16,349	16,684	18,493	20,704	22,555	25,093
SC	54,363	58,532	60,928	70,645	75,099	78,716	86,865	96,437	100,539	127,514	140,826	159,830
SD	23,584	24,533	25,820	27,413	25,159	27,639	26,974	28,256	27,735	28,815	33,826	36,319
TN	149,462	155,623	160,667	167,737	169,418	181,476	201,499	226,025	232,212	234,288	247,857	256,148
TX	2,865,595	2,981,167	3,030,914	3,209,968	3,313,837	3,377,093	3,482,821	3,709,715	3,485,246	3,696,396	3,877,376	4,093,357
UT	61,401	75,650	81,879	92,890	103,628	119,625	114,601	106,474	105,052	109,866	119,879	121,937
VT	(1)	(1)	(1)	(1)	(1)	-	-	(1)	(1)	(1)	(1)	(1)
VA	59,842	66,181	70,579	77,254	83,011	89,072	95,700	121,702	115,887	121,928	128,748	136,523
WA	58,650	64,934	70,343	81,431	86,834	105,789	108,108	116,879	127,230	139,421	144,521	149,992
WV	191,548	179,969	192,221	188,602	190,264	182,515	179,084	183,109	151,078	183,003	169,841	181,278
WI	82,377	90,620	113,679	136,516	152,354	170,202	200,484	224,675	248,033	271,765	316,279	337,822
WY	59,119	59,635	61,451	67,336	69,879	67,559	70,298	79,174	73,284	78,801	100,071	109,996
TOT	11,819,638	12,509,427	13,081,714	13,890,129	14,640,480	15,536,373	16,033,189	17,191,711	17,388,360	18,632,062	20,056,240	21,139,386

Note: Consumption includes volumes of natural gas which is distributed as a component of mixed gas.
(1) Included with New Hampshire.
(2) Included with Maryland.
Source: 1947-1966 U.S. Bureau of Mines, Mineral Yearbooks--Fuels
1967-Present U.S. Energy Information Administration, Natural Gas Annual

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	285,973	278,467	272,068	274,761	264,088	225,979	241,237	237,258	283,435	269,240
Alaska	67,706	74,658	63,073	62,874	84,751	90,121	116,278	145,025	157,236	153,345
Arizona	213,313	227,909	214,323	192,446	156,222	171,275	167,092	175,041	172,738	165,850
Arkansas	333,644	316,375	327,803	290,393	258,220	248,941	229,558	220,699	250,747	273,720
California	2,149,264	2,185,543	2,045,627	1,834,413	1,832,849	1,756,611	1,772,041	1,563,172	1,810,381	1,607,731
Colorado	289,369	309,703	324,007	313,056	307,772	302,284	282,215	267,838	292,272	256,363
Connecticut	61,434	64,008	62,609	66,343	64,011	65,855	64,068	65,191	67,957	72,583
Delaware	26,452	24,088	22,949	20,365	18,603	19,182	15,787	20,626	24,981	29,797
Dist. of Col.	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	27,868
Florida	336,721	298,977	311,498	289,551	280,095	289,017	302,344	318,344	344,177	316,588
Georgia	342,579	331,143	348,089	330,339	326,559	261,320	264,665	278,272	312,299	315,201
Idaho	50,096	56,630	56,045	53,057	60,451	47,156	45,537	44,210	54,237	49,047
Illinois	1,229,277	1,207,289	1,150,266	1,149,394	1,095,115	1,175,235	1,167,099	1,174,934	1,142,732	1,089,720
Indiana	566,996	576,948	542,300	531,872	477,341	425,221	398,268	440,955	504,185	489,254
Iowa	344,639	344,516	364,640	367,595	345,798	311,425	280,246	238,229	291,521	269,581
Kansas	606,989	628,109	604,460	587,012	498,727	515,197	506,910	519,346	584,236	488,338
Kentucky	244,360	255,208	245,472	228,003	207,539	245,967	219,521	212,913	218,689	202,284
Louisiana	1,883,924	1,939,762	2,009,859	2,008,364	1,788,588	2,043,705	2,190,848	2,249,172	1,978,382	1,794,007
Maine	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2,268
Maryland	188,371	204,922	201,961	199,331	165,932	176,272	158,838	161,695	201,584	160,244
Massachusetts	156,451	160,280	155,547	155,268	153,967	156,247	160,343	160,503	156,459	182,587
Michigan	850,562	864,770	920,351	936,043	884,184	888,035	741,295	789,594	875,726	865,137
Minnesota	351,442	351,408	360,811	351,644	331,186	320,156	293,301	313,229	334,202	285,846
Mississippi	378,321	377,986	313,992	276,199	230,053	199,122	197,689	203,719	254,366	263,530
Missouri	429,105	425,215	426,807	409,884	369,620	380,258	366,970	358,905	347,257	318,450
Montana	88,271	84,322	90,230	79,909	79,520	74,371	70,956	72,649	69,805	60,724
Nebraska	223,674	224,562	229,632	222,807	218,834	198,634	188,804	163,051	170,013	163,079
Nevada	66,511	69,522	73,072	63,438	61,251	66,797	71,052	64,506	84,433	58,454
New Hampshire	12,088	13,267	13,881	14,697	13,534	13,545	13,609	14,039	14,881	9,474
New Jersey	326,768	321,288	301,566	275,050	244,102	321,535	247,120	228,843	260,579	339,825
New Mexico	269,368	287,993	256,811	257,436	240,260	278,976	229,813	213,698	211,182	221,793
New York	716,550	692,730	682,547	627,493	576,883	595,933	561,698	569,702	623,891	737,443
North Carolina	160,567	163,897	160,871	140,217	114,822	101,175	72,527	81,989	130,884	153,316
North Dakota	33,577	36,473	32,428	35,459	36,826	41,177	37,650	39,067	29,236	22,848
Ohio	1,087,126	1,147,804	1,104,156	1,086,651	956,876	1,005,927	847,497	929,593	898,029	896,983
Oklahoma	611,582	629,757	611,738	660,010	668,819	760,110	766,986	770,249	824,908	722,318
Oregon	100,897	110,360	107,961	98,051	109,898	92,500	72,521	86,140	93,707	78,703
Pennsylvania	802,132	828,961	783,297	715,548	653,742	713,518	668,337	673,770	740,818	775,715
Rhode Island	25,662	22,494	20,559	23,781	23,129	20,697	25,631	23,042	27,219	27,630
South Carolina	150,263	144,120	153,147	131,991	122,949	148,989	138,585	117,573	119,319	142,228
South Dakota	31,832	34,077	31,221	32,076	32,534	39,207	36,097	35,423	25,724	24,078
Tennessee	265,011	277,275	293,620	260,171	217,328	212,326	202,135	184,048	226,477	229,661
Texas	4,364,728	4,412,636	4,621,378	4,463,488	3,944,377	3,975,307	4,143,023	4,211,432	4,001,355	4,091,099
Utah	121,403	124,093	123,106	121,015	124,160	146,205	106,315	118,512	126,047	115,092
Vermont	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	3,991
Virginia	144,014	155,658	152,848	143,650	121,320	123,509	118,020	[illegible],144	134,088	158,479
Washington	156,663	170,448	197,861	182,723	164,334	148,781	142,657	127,280	158,515	128,770
West Virginia	178,380	199,141	186,316	182,370	158,435	150,723	144,535	151,839	148,538	143,047
Wisconsin	348,132	320,826	367,961	381,1[illegible]3	364,801	315,154	349,160	370,726	367,517	351,857
Wyoming	115,286	125,834	108,599	95,746	87,188	86,819	83,623	87,292	93,797	68,975
U.S. Total	21,793,454	22,101,452	22,049,363	21,223,133	19,537,593	19,946,496	19,520,581	19,627,478	20,240,761	19,877,293(3)

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(1) Included with New Hampshire.
(2) Included with Maryland.
(3) Total includes 3,131 MMcf from Hawaii in 1980.
(4) Total may not add due to independent rounding.
Source: U.S. Energy Information Administration, Natural Gas Annuals

Section XIII
Table 10c

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1981(1)	1982	1983	1984	1985	1986	1987
Alabama	271,280	240,957	221,583	231,997	219,455	202,923	207,757
Alaska	121,727	237,881	239,200	257,525	212,765	206,452	249,269
Arizona	182,533	135,031	115,233	121,149	130,776	101,249	108,976
Arkansas	264,787	226,941	206,966	210,021	195,633	199,197	169,626
California	1,858,178	1,682,718	1,535,031	1,669,705	1,846,078	1,531,323	1,934,909
Colorado	211,780	224,991	213,812	229,647	218,942	197,847	210,046
Connecticut	76,829	78,246	74,427	81,139	78,215	78,903	91,842
Delaware	30,643	27,833	34,884	42,962	38,493	33,009	36,703
Dist. of Col.	29,023	29,280	29,340	29,449	28,902	29,586	30,988
Florida	337,557	324,807	306,307	303,309	289,706	288,541	300,339
Georgia	316,613	294,651	295,531	307,323	281,805	279,082	303,420
Hawaii	2,899	2,804	2,669	2,375	2,483	2,463	2,610
Idaho	44,960	39,971	35,179	38,604	39,194	34,721	37,147
Illinois	1,061,957	994,179	938,340	1,032,779	962,039	924,280	873,436
Indiana	496,349	467,842	426,770	452,284	432,958	395,181	412,588
Iowa	253,231	237,089	220,517	234,846	225,903	206,902	200,877
Kansas	428,130	400,920	346,204	363,671	355,467	312,680	325,866
Kentucky	199,445	188,536	174,306	189,255	172,510	167,713	171,190
Louisiana	1,781,716	1,556,052	1,412,983	1,594,346	1,386,365	1,438,563	1,500,679
Maine	2,326	2,691	2,424	2,44[illegible]	2,531	2,473	2,641
Maryland	175,289	157,990	145,628	158,989	150,838	152,542	168,553
Massachusetts	184,575	195,107	191,815	208,758	218,884	186,350	226,820
Michigan	800,873	748,141	696,455	718,103	709,232	671,323	657,396
Minnesota	266,282	262,039	240,777	255,638	257,480	244,772	231,750
Mississippi	242,987	269,131	237,859	268,560	226,663	214,824	208,582
Missouri	283,514	279,449	258,560	264,954	259,900	241,660	231,941
Montana	52,452	52,208	46,249	48,864	47,265	41,148	38,786
Nebraska	138,322	138,238	129,920	134,465	126,135	104,732	102,719
Nevada	73,182	46,627	41,926	42,256	39,200	33,790	41,333
New Hampshire	10,220	10,078	9,655	10,531	10,629	10,291	11,970
New Jersey	390,121	375,660	405,387	418,220	379,230	353,465	421,200
New Mexico	196,212	204,163	178,698	161,850	151,128	134,198	153,247
New York	760,463	775,268	720,398	790,011	762,261	728,802	756,559
North Carolina	152,496	142,129	136,579	143,854	133,825	135,819	148,653
North Dakota	34,445	28,370	26,126	30,153	28,096	25,471	24,828
Ohio	870,341	813,519	747,268	785,297	733,116	716,778	714,929
Oklahoma	670,971	676,762	628,950	652,953	587,407	554,125	596,092
Oregon	75,562	70,824	67,045	78,643	83,002	70,973	80,249
Pennsylvania	784,691	694,639	643,952	676,721	625,667	609,953	626,770
Rhode Island	29,202	27,874	29,044	31,689	29,874	26,354	35,930
South Carolina	141,924	98,100	101,632	108,429	97,469	98,549	105,661
South Dakota	22,056	25,089	23,326	24,592	25,202	23,292	21,087
Tennessee	223,529	207,161	194,610	206,353	190,266	188,000	200,571
Texas	3,926,687	3,394,404	3,241,515	3,432,624	3,385,715	3,185,509	3,304,492
Utah	102,239	117,706	110,185	115,578	115,117	105,175	98,987
Vermont	4,383	4,370	4,359	4,868	4,998	5,019	5,181
Virginia	151,737	150,964	142,944	143,582	139,458	141,024	142,096
Washington	124,942	108,653	107,193	126,287	134,599	118,360	131,746
West Virginia	148,527	130,029	115,813	124,368	117,168	112,573	115,091
Wisconsin	324,611	312,007	299,099	305,076	308,365	278,848	280,184
Wyoming	69,056	90,923	80,871	85,423	82,172	75,029	81,704
U.S. Total	19,403,858	18,001,055	16,834,914	17,950,528	17,280,943	16,221,296	17,136,938

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(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Natural Gas Annuals

Section XIII
Table 11

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Alabama	0.5	0.7	0.7	2.5	3.1	8.3	8.9	8.2	9.5	17.8	16.4
Alaska	--	--	--	--	--	--	--	--	--	--	--
Arkansas	885.3	896.9	869.4	902.7	926.3	979.2	1,204.7	1,159.1	1,158.0	1,165.2	1,276.1
California	10,109.2	10,137.2	9,937.4	9,707.4	9,430.9	9,289.3	9,109.6	8,977.6	8,844.7	8,703.7	8,904.3
Colorado	330.1	1,341.9	1,220.4	1,109.4	1,132.3	1,157.9	1,854.2	1,922.4	2,241.3	2,409.6	2,367.8
Florida	0.7	1.2	2.4	2.2	2.3	3.0	2.5	2.0	3.2	2.7	2.2
Illinois	219.9	226.6	231.9	228.6	225.9	210.5	230.0	252.4	232.3	218.5	165.5
Indiana	12.9	21.5	25.1	31.0	30.6	35.5	35.6	35.9	32.9	33.6	30.8
Kansas	14,477.9	14,329.6	14,013.0	13,715.9	13,384.4	14,116.5	15,701.9	15,672.7	16,204.6	17,470.9	19,191.2
Kentucky	1,372.0	1,370.7	1,342.1	1,323.4	1,318.4	1,306.4	1,294.5	1,279.6	1,255.4	1,238.8	1,218.4
Louisiana	23,353.7	23,847.3	26,542.9	28,378.3	28,847.5	31,280.8	34,271.8	36,600.1	42,205.1	44,809.3	51,156.6
Michigan	167.6	182.0	213.7	194.0	201.9	253.2	274.0	328.3	324.1	359.8	441.6
Mississippi	2,439.4	2,490.7	2,515.2	2,505.5	2,426.7	2,351.2	2,555.2	2,757.6	2,594.2	2,390.3	2,285.3
Montana	696.7	848.0	799.1	793.0	823.6	823.1	759.9	719.8	715.8	692.6	666.8
Nebraska	0.6	1.6	8.0	43.9	95.3	93.4	181.1	191.9	202.3	224.2	188.3
New Mexico	5,957.8	5,575.9	6,207.1	6,952.7	11,527.0	13,962.6	17,427.0	17,147.0	18,484.0	23,345.2	22,137.1
New York	64.5	67.2	66.3	64.4	66.4	68.3	70.6	69.0	75.3	84.8	932.9
North Dakota	--	--	--	6.3	69.6	97.8	169.0	163.1	279.2	395.3	74394
Ohio	607.9	626.0	649.0	655.3	685.4	727.5	751.9	770.5	805.5	849.0	896.9
Oklahoma	11,289.2	11,270.9	11,562.8	11,571.1	11,740.2	11,700.9	12,162.0	12,328.8	13,133.0	13,700.2	14,182.0
Pennsylvania	480.4	614.1	618.3	623.8	616.1	705.7	747.8	728.2	750.3	772.0	849.0
Texas	89,536.6	95,188.8	98,631.8	101,847.9	105,079.4	105,158.5	105,951.1	104,558.1	107,699.4	112,116.5	112,470.4
Utah	66.3	69.4	65.2	84.3	95.3	281.9	1,107.0	385.3	418.6	616.4	854.6
Virginia	--	--	--	--	9.9	27.9	28.4	31.5	34.6	35.4	37.3
West Virginia	1,771.1	1,727.7	1,705.9	1,641.7	1,662.4	1,651.1	1,645.0	1,598.6	1,556.4	1,553.3	1,552.5
Wyoming	1,185.3	2,082.4	2,161.9	2,183.1	2,327.6	2,308.5	2,724.8	2,839.6	3,178.7	3,218.4	3,438.7
Miscellaneous(1)	0.1	8.0	11.9	16.4	30.3	31.4	230.6	233.6	44.1	59.9	68.3
TOTAL U.S.(2)	165,025.8	173,925.1	179,401.7	184,584.7	192,758.9	198,631.6	210,298.8	210,560.9	222,482.5	236,483.2	245,230.1

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada, Annuals.

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Alabama	17.7	15.8	14.9	13.3	12.8	19.4	19.6	24.0	14.4	9.1	16.1
Alaska	--	57.7	107.1	921.8	1,634.3	1,690.7	1,831.4	1,985.3	2,946.9	3,635.3	5,252.3
Arkansas	1,380.8	1,415.1	1,451.8	1,469.0	1,643.7	1,792.6	2,100.1	2,269.0	2,599.6	2,811.3	2,715.1
California	8,917.8	8,546.8	8,795.9	9,054.2	9,121.4	8,865.7	9,053.7	8,832.4	8,474.4	7,723.8	7,316.3
Colorado	2,336.5	2,482.6	2,031.7	2,158.9	2,204.8	1,876.1	1,729.3	1,717.6	1,651.4	1,769.3	1,660.1
Florida	2.8	2.4	1.8	1.4	0.5	0.6	1.0	4.0	5.4	1.1	0.9
Illinois	169.6	174.2	172.2	163.3	158.2	168.6	179.5	209.7	236.5	258.6	297.9
Indiana	30.4	34.9	33.9	32.1	49.6	60.2	71.3	72.4	71.2	74.8	75.5
Kansas	20,124.0	19,872.9	19,513.7	19,085.8	18,567.2	17,994.2	17,278.1	16,596.4	15,923.3	15,283.7	14,511.2
Kentucky	1,208.7	1,153.8	1,137.6	1,120.7	1,108.9	1,085.2	1,094.4	1,092.2	1,017.0	954.0	923.3
Louisiana	54,812.4	59,528.9	63,041.9	65,670.1	71,544.1	75,365.0	79,076.3	82,811.2	83,684.1	86,290.0	88,015.6
Michigan	495.4	512.6	582.6	663.0	647.0	722.8	774.3	745.8	773.1	760.9	757.4
Mississippi	2,584.3	2,473.0	2,528.5	2,832.5	2,735.8	2,481.6	2,355.8	1,973.4	1,668.9	1,597.0	1,434.1
Montana	678.3	661.9	622.8	593.1	600.2	598.1	590.3	595.9	620.4	837.7	911.5
Nebraska	142.5	132.0	117.2	103.7	100.2	100.0	93.4	79.6	72.8	63.8	56.8
New Mexico	21,065.0	17,815.5	15,519.0	14,677.6	14,122.7	15,037.8	15,354.4	15,374.6	14,753.1	15,092.5	15,143.2
New York	95.9	105.9	95.7	127.6	131.2	132.3	133.5	135.7	120.9	121.1	124.1
North Dakota	1,118.4	1,200.0	1,144.8	943.4	962.7	1,119.6	1,110.6	1,121.2	1,024.5	882.1	866.8
Ohio	813.6	744.7	761.4	729.9	727.9	748.2	709.4	754.8	755.2	762.7	783.9
Oklahoma	15,124.2	16,560.9	17,217.4	17,256.7	18,259.0	19,138.8	19,757.2	20,357.4	21,122.2	19,403.8	18,368.3
Pennsylvania	865.3	1,046.3	1,186.0	1,162.5	1,175.1	1,214.5	1,243.6	1,257.0	1,350.6	1,392.2	1,345.0
Texas	114,420.9	119,821.5	118,840.4	119,187.9	118,854.8	117,809.4	118,855.1	120,616.8	123,609.3	125,415.1	119,001.1
Utah	1,052.3	1,257.4	1,517.9	2,019.1	1,786.4	1,638.3	1,519.4	1,438.8	1,372.2	1,226.5	1,156.6
Virginia	38.2	38.4	33.1	33.9	33.0	31.3	32.2	32.5	37.6	37.8	34.3
West Virginia	1,549.2	1,584.9	1,821.2	2,008.0	2,026.0	2,311.2	2,347.9	2,494.0	2,622.2	2,580.0	2,585.6
Wyoming	3,630.0	3,826.2	3,913.4	4,104.6	3,931.2	3,988.5	3,768.6	3,703.3	3,494.0	3,685.5	3,768.5
Miscellaneous(1)	87.4	105.2	122.7	139.6	150.0	160.2	171.2	174.0	211.6	238.3	228.4
TOTAL U.S.(2)	252,761.8	261,170.4	262,326.3	266,273.6	272,278.9	276,151.2	281,251.5	286,468.9	289,332.8	292,907.7	287,349.9

(1) Includes Arizona, Florida, Iowa, Maryland, Missouri, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada, Annuals.

Section XIII
Table 11b

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Alabama	56.7	162.0	180.5	245.7	327.4	507.4	771.0	707.2	530.0	514.0	652.0
Alaska	5,202.1	31,130.8	31,365.4	31,455.4	31,642.6	31,866.6	32,050.7	31,929.6	32,243.0	32,045.0	32,259.0
Arkansas	2,632.8	2,580.7	2,430.1	2,455.9	2,269.4	2,113.4	1,993.3	1,728.3	1,660.0	1,681.0	1,703.0
California	6,870.9	6,299.8	5,729.5	5,328.9	5,199.8	5,194.6	5,484.0	5,342.0	4,737.0	4,947.0	5,022.0
Colorado	1,596.3	1,628.8	1,818.3	1,655.2	1,868.3	1,881.7	1,893.0	1,887.8	2,512.0	2,765.0	2,608.0
Florida	4.7	61.1	178.7	180.6	148.9	308.9	266.9	257.5	151.0	119.0	77.0
Illinois	337.8	415.4	499.0	545.4	380.5	399.4	380.8	376.9	(3)	(3)	(3)
Indiana	77.6	82.7	86.7	87.3	66.7	64.1	59.8	45.4	(3)	(3)	(3)
Kansas	14,125.1	13,325.1	12,535.2	11,938.7	11,722.4	11,704.7	12,661.2	11,950.6	11,457.0	10,992.0	10,243.0
Kentucky	920.5	977.8	956.3	938.1	864.9	844.0	812.6	771.5	451.0	545.0	468.0
Louisiana	85,056.6	82,956.7	78,625.8	74,971.3	69,151.6	64,052.4	61,309.4	57,501.8	57,010.0	55,725.0	50,042.0
Michigan	751.0	939.7	1,016.5	1,296.8	1,548.5	1,458.3	1,606.7	1,598.1	1,386.0	1,422.0	1,204.0
Mississippi	1,410.9	1,333.9	1,117.4	1,104.3	1,178.2	1,079.4	1,207.6	1,061.3	1,437.0	1,635.0	1,504.0
Montana	1,110.2	1,099.9	1,024.6	1,064.0	1,092.4	901.3	930.0	1,106.3	887.0	926.0	825.0
Nebraska	56.6	58.2	59.4	50.3	48.8	54.6	55.8	59.2	(3)	(3)	(3)
New Mexico	14,281.5	13,290.0	13,068.0	12,335.6	[illegible]488.4	[illegible]944.9	11,759.3	11,916.6	12,000.0	12,688.0	13,724.0
New York	120.5	126.0	139.1	139.2	136.8	165.5	215.8	236.0	165.0	193.0	211.0
North Dakota	648.6	567.4	503.7	441.6	448.2	432.7	416.8	405.9	361.0	374.0	439.0
Ohio	809.3	993.5	1,068.4	1,146.7	1,179.4	1,308.2	1,354.0	1,350.6	495.0	684.0	1,479.0
Oklahoma	17,593.2	16,954.3	15,712.8	14,492.0	14,098.7	13,390.3	13,083.0	12,435.3	13,889.0	14,417.0	13,816.0
Pennsylvania	1,303.9	1,377.5	1,395.9	1,406.9	1,494.4	1,492.1	1,682.5	1,651.9	769.0	899.0	1,515.0
Texas	112,392.6	106,353.0	101,472.1	95,042.0	84,936.5	78,540.7	71,036.9	64,651.4	56,422.0	55,583.0	53,021.0
Utah	1,090.8	1,065.2	982.0	1,022.1	1,024.7	1,031.4	917.4	829.9	877.0	925.0	948.0
Virginia	31.4	32.5	31.1	35.9	37.3	44.7	47.5	56.4	(3)	(3)	(3)
West Virginia	2,447.3	2,436.4	2,411.8	2,346.0	2,319.8	2,265.6	2,311.3	2,273.3	1,567.0	1,634.0	1,558.0
Wyoming	3,937.0	4,243.3	4,131.5	4,088.7	4,109.5	3,917.4	3,703.2	3,704.4	6,305.0	7,211.0	7,526.0
Miscellaneous(1)	242.7	355.0	266.0	270.0	165.9	168.1	189.4	191.0	102.0	109.0	153.0
TOTAL U.S.(2)	275,108.8	290,746.4	278,805.6	266,084.8	249,950.2	237,132.5	228,200.2	216,026.1	207,413.0	208,033.0	200,997.0

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.
(3) Included in Miscellaneous.

Source: 1969-1976: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the U. S. and Canada, Annuals.
1977-1979: DOE/EIA--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	636.0	648.0	648.0	785.0	961.0	821.0	951.0	842.0
Alaska	33,362.0	33,037.0	34,990.0	34,283.0	34,476.0	33,847.0	32,664.0	33,225.0
Arkansas	1,774.0	1,801.0	1,958.0	2,069.0	2,227.0	2,019.0	1,992.0	1,997.0
California	5,414.0	5,617.0	5,552.0	5,781.0	5,554.0	4,325.0(4)	3,928.0(4)	3,740.0(4)
Colorado	2,922.0	2,961.0	3,314.0	3,148.0	2,943.0	2,881.0	3,027.0	2,942.0
Florida	84.0	69.0	64.0	49.0	65.0	55.0	49.0	49.0
Illinois	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Indiana	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Kansas	9,508.0	9,860.0	9,724.0	9,553.0	9,387.0	9,337.0	10,509.0	10,494.0
Kentucky	508.0	530.0	551.0	554.0	613.0	766.0	841.0	909.0
Louisiana	47,325.0	47,377.0	44,916.0	42,561.0	41,399.0	14,038.0(4)	12,930.0(4)	12,430.0(4)
Michigan	1,406.0	1,118.0	1,084.0	1,219.0	1,112.0	985.0	1,139.0	1,451.0
Mississippi	1,769.0	2,035.0	1,796.0	1,596.0	1,491.0	1,360.0	1,300.0	1,220.0
Montana	1,287.0	1,321.0	847.0	896.0	802.0	857.0	803.0	780.0
Nebraska	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
New Mexico	13,287.0	13,870.0	12,418.0	11,676.0	11,364.0	10,900.0	11,808.0	11,620.0
New York	208.0	264.0	229.0	295.0	389.0	369.0	457.0	410.0
North Dakota	537.0	581.0	629.0	600.0	566.0	569.0	541.0	508.0
Ohio	1,699.0	965.0	1,141.0	2,030.0	1,541.0	1,331.0	1,420.0	1,069.0
Oklahoma	13,138.0	14,699.0	16,207.0	16,211.0	16,126.0	16,040.0	16,685.0	16,711.0
Pennsylvania	951.0	1,264.0	1,429.0	1,882.0	1,575.0	1,617.0	1,560.0	1,647.0
Texas	50,287.0	50,469.0	49,757.0	50,052.0	49,883.0	41,775.0(4)	40,574.0(4)	38,711.0(4)
Utah	1,201.0	1,912.0	2,161.0	2,333.0	2,080.0	1,999.0	1,895.0	1,947.0
Virginia	(3)	(3)	122.0	175.0	216.0	235.0	253.0	248.0
West Virginia	2,422.0	1,834.0	2,148.0	2,194.0	2,136.0	2,058.0	2,148.0	2,242.0
Wyoming	9,100.0	9,307.0	9,758.0	10,227.0	10,482.0	10,617.0	9,756.0	10,023.0
Miscellaneous(1)	176.0	191.0	69.0	78.0	75.0	76.0	133.0	65.0
Federal offshore(5)						34,492.0	34,223.0	31,931.0
U.S. Total(2)	199,021.0	201,730.0	201,512.0	200,247.0	197,463.0	193,369.0	191,586.0	187,211.0

(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.
(3) Included in Miscellaneous.
(4) Includes offshore reserves in state waters only.
(5) Federal Offshore is a designation begun in the 1986 reported data. This number includes all state offshore reserves in federal waters, which accounts for the large decline in certain states beginning in 1985.

Source: Department of Energy, Energy Information Administration -- U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

Section XIII
Table 12

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION
(Millions of Cubic Feet)

1960		1970		1980		1983(6)	
Company	Production	Company	Production	Company	Production	Company	Production
Exxon	574,328(1)	Exxon	2,003,120(1)	Exxon	1,231,145	Exxon	855,925
Standard of Ind.	573,050	Texaco	1,399,410(1)	Texaco	955,570(1)	Standard of Ind.	651,525
Phillips	501,853	Standard of Ind.	1,114,710	Standard of Ind.	820,520	Texaco	582,540(1)
Texaco	499,971(1)	Gulf	1,006,305	Mobil	711,750	Shell	539,105
Mobil	398,945(2)	Shell	930,020	Gulf	660,030(4)	Mobil	467,930
Shell	389,384	Mobil	813,585	Shell	649,700	Gulf	465,740(4)
Gulf	365,000(1)	Atlantic Richfield	728,905	Atlantic Richfield	447,855(1)	Atlantic Richfiel	453,159
Cities Service	323,564	Phillips	580,715	Standard of Calif.	444,935(1)	Standard of Calif.	421,968
Sun	273,694	Union	567,247	Union	425,225	Tenneco	357,149
Standard of Calif.	249,126	Standard of Calif.	537,645	Tenneco	406,789	Unocal (Union)(4)	298,351
Superiod	233,999(2)	Sun	525,965(3)	Sun	382,520(1)	Phillips	291,635
United Gas Corp.	204,000(3)	Getty	439,832	Phillips	344,195	Sun	270,830
Atlantic Richfield	186,040	Cities Service	368,614	Getty	312,171	Getty	266,774
Continental	161,477	Superior	338,836	Cities Service	296,125(4)	Occidental	239,440(4)
Sinclair	155,941	Continental	308,060	Conoco	283,970	Superior	234,732
Sunray-DX	151,663(3)	Tenneco	291,529	El Paso	283,000	DuPont	213,160(4)
Tidewater	139,517(3)	El Paso	219,730	Superior	283,000	El Paso	153,000
Union	124,963	Pennzoil-United	215,715	Pennzoil	213,825	Texas Oil & Gas	149,507
Skelly	124,493(3)	Marathon	171,597	Marathon	164,159	U.S. Steel	129,515
Pure	114,614(3)	Amerada Hess	160,892	Columbia	156,698(5)	Pennzoil	118,051
U.S. TOTAL	12,771,038	U.S. TOTAL	21,920,642	U.S. TOTAL	19,602,000	U.S. TOTAL	16,033,000

(1) Natural gas sales.
(2) Gross.
(3) Includes Canadian production.
(4) Volume before extraction of natural gas liquids.
(5) Includes synthetic gas.
(6) Reported on a "dry" gas basis unless otherwise noted.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

Section XIII
Table 12a

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION(1)
(Millions of Cubic Feet)

1984		1985		1986	
Company	Production	Company	Production	Company	Production
Texaco	964,726(2)	Chevron	765,770	Chevron	718,320
Exxon	907,025	Exxon	761,025	Exxon	700,435
Chevron(3)	903,302	Texaco	755,915(2)	Shell	653,715
Mobil(4)	750,440	Amoco (Std. of Ind.)	682,185	Amoco	631,815
Standard of Ind.	693,500	Mobil	603,345	Texaco	613,930
Shell	589,475	Shell	601,885	Mobil	546,770
Atlantic Richfield	501,462	Atlantic Richfield	434,355	ARCO	454,060
Tenneco	433,601	Tenneco	375,692	Tenneco	364,677
Phillips(5)	372,994	Phillips	319,740	USX (U.S. Steel)(10)	308,042
Unocal	304,666	Unocal	287,255	Phillips	299,300
Sun	286,160	Sun	239,440	Unocal	248,930
Occidental	248,565(6)	DuPont	230,680(6)	DuPont	248,000
DuPont	247,105(6)	Occidental	219,365(6)	Occidental	244,185
Texas Oil & Gas	177,173	Texas Oil and Gas	198,475	Sun	219,000
U.S. Steel(7)	150,937	Consolidated Oil and Gas	150,100	Burlington Northern(11)	145,000
Pennzoil	144,329	Pennzoil	138,438	Enron	127,276
Consolidated Natural Gas	126,600	U.S. Steel	137,712	Union Pacific	122,700
Columbia	125,462(8)	Union Pacific	115,194	Pennzoil	116,760
Union Pacific	121,363	Enron Corp.(9)	109,309	Mesa(12)	112,367
El Paso	107,000	El Paso	107,000	Consolidated Natural Gas	112,000
U.S. TOTAL	17,231,000	U.S. TOTAL	16,428,000	U.S. TOTAL	16,036,000

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(1) Reported on a "dry" gas basis unless otherwise noted.

(2) Sales. Texaco's figure also includes 100% of Getty Oil Company's estimated annualized production. (Texaco acquired Getty on March 1, 1984.)

(3) Standard Oil of California acquired the Gulf Corporation on June 15, 1984, and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure includes 100% of Gulf's annualized production before the extraction of natural gas liquids.

(4) Mobil acquired Superior on September 23, 1984. Mobil's figure includes 100% of Superior's estimated annualized production.

(5) Phillips acquired Aminoil from R.J. Reynolds on October 26, 1984. Phillips' figure includes 100% of Aminoil's estimated annualized production.

(6) Volume before extraction of natural gas liquids.

(7) U.S. Steel acquired the U.S. assets of Husky Oil Ltd. on May 31, 1984. U.S. Steel's figure includes 100% of Husky's estimated annualized production of its U.S. assets.

(8) Includes synthetic gas and liquified petroleum gas.

(9) Formerly HNG/InterNorth, Inc. On June 1, 1985 InterNorth Inc. acquired the Houston Natural Gas Corporation and changed its name to reflect the acquisition. By April 1986 the corporation changed its name to Enron Corporation. Enron's figure includes Houston Natural Gas's 1985 full-year production. Enron's figure also includes cost and non-cost of service production.

(10) On February 11, 1986 a subsidiary of U.S. Steel merged with Texas Oil and Gas Corp. (TXO). On July 8, 1986, in recognition of its major diversification into oil and gas businesses, U.S. Steel changed its name to USX Corporation.

(11) On December 13, 1985 Southland Royalty became a wholly-owned subsidiary of Burlington Northern Inc. (BNI). BNI also is the parent company of El Paso Natural Gas Company.

(12) On June 30, 1986, Mesa acquired the assets of Pioneer Corporation. Mesa's figure includes 100 percent of Pioneer's estimated annualized production.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1986, Discussion paper #014R.

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION(1)
(Millions of Cubic Feet)

1987

Company	Production
Chevron	708,465
Mobil	656,635
Texaco	644,590
Exxon	619,770
Amoco	617,000
Shell	558,085
ARCO	464,280
Tenneco	368,377
Phillips	281,780(2)
Occidental	281,415(2)
USX	274,480
Unocal	271,925
Sun	230,315
DuPont	219,365(2)
Burlington Northern	151,000
Union Pacific	124,830
Enron	120,450
Pennzoil	115,052
Consolidated Natural Gas	109,562
Mesa	103,797
U.S. TOTAL	16,334,000

(1) Reported on a "dry" gas basis unless otherwise noted.
(2) Volume before extraction of natural gas liquids.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion paper #014R.

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE
(In Dollars per Thousand Cubic Feet)

State	1967	1968	1969	1970	1971	1972	1973	1974	1975
Alabama	1.13	1.10	1.09	1.13	1.19	1.27	1.37	1.55	1.57
Alaska	1.51	1.52	1.52	1.52	1.53	1.55	1.57	1.58	1.63
Arizona	0.96	0.97	1.04	1.20	1.23	1.24	1.37	1.50	1.53
Arkansas	0.72	0.70	0.71	0.75	0.79	0.83	0.87	1.06	1.12
California	0.93	0.93	0.93	0.99	1.03	1.08	1.16	1.38	1.57
Colorado	0.66	0.68	0.69	0.72	0.75	0.78	0.83	1.00	1.16
Connecticut	1.83	1.81	1.82	1.91	2.07	2.09	2.25	2.79	3.29
Delaware	1.60	1.59	1.50	1.58	1.63	1.71	1.85	2.11	2.43
District of Columbia	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Florida	2.26	2.59	2.48	2.51	2.54	2.66	2.70	2.85	2.74
Georgia	1.03	1.02	1.02	1.05	1.13	1.26	1.30	1.40	1.50
Hawaii	NA	NA	NA	NA	NA	NA	NA	NA	NA
Idaho	1.29	1.36	1.37	1.39	1.49	1.51	1.52	1.80	2.18
Illinois	1.02	1.02	1.00	1.05	1.07	1.13	1.21	1.35	1.61
Indiana	0.98	0.94	0.94	1.01	1.08	1.14	1.20	1.28	1.45
Iowa	0.93	0.93	0.94	0.97	1.03	1.11	1.17	1.22	1.43
Kansas	0.59	0.63	0.64	0.68	0.72	0.74	0.75	0.90	1.03
Kentucky	0.84	0.79	0.80	0.83	0.88	0.93	0.99	1.10	1.23
Louisiana	0.75	0.75	0.75	0.77	0.84	0.91	0.97	1.12	1.37
Maine	1.96(2)	2.05(2)	1.97(2)	1.99(2)	2.05(2)	2.14(2)	2.17(2)	2.38(2)	2.65(2)
Maryland	1.44(3)	1.42(3)	1.42(3)	1.45(3)	1.51(3)	1.65(3)	1.68(3)	0.50(3)	2.33(3)
Massachusetts	1.88	1.86	1.86	1.92	2.12	2.29	2.40	2.71	3.15
Michigan	0.98	0.98	0.98	1.01	1.06	1.10	1.18	1.37	1.62
Minnesota	1.03	1.03	1.07	1.10	1.18	1.23	1.30	1.41	1.57
Mississippi	0.88	0.97	0.88	0.88	0.94	1.08	1.09	1.23	1.41
Missouri	0.84	0.86	0.89	0.96	1.02	1.10	1.16	1.27	1.49
Montana	0.80	0.82	0.88	0.91	0.93	0.97	1.09	1.12	1.30
Nebraska	0.79	0.80	0.83	0.85	0.92	0.99	1.04	1.14	1.28
Nevada	1.42	1.51	1.49	1.51	1.51	1.52	1.54	1.72	1.95
New Hampshire	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
New Jersey	1.91	1.91	1.85	1.89	1.95	2.02	2.08	2.25	2.69
New Mexico	0.91	0.89	0.91	0.93	0.95	0.97	1.00	1.24	1.33
New York	1.42	1.38	1.37	1.40	1.50	1.62	1.74	2.00	2.54
North Carolina	1.31	1.29	1.25	1.30	1.34	1.41	1.51	1.69	2.02
North Dakota	0.94	0.93	0.95	1.02	1.10	1.13	1.14	1.19	1.51
Ohio	0.86	0.85	0.87	0.90	0.98	1.05	1.11	1.24	1.50
Oklahoma	0.78	0.77	0.82	0.84	0.87	0.90	0.92	1.05	1.22
Oregon	1.57	1.54	1.49	1.51	1.60	1.68	1.76	2.00	2.20
Pennsylvania	1.15	1.15	1.18	1.24	1.28	1.36	1.48	1.66	1.93
Rhode Island	1.81	1.78	1.78	1.83	1.93	2.05	2.37	2.55	3.09
South Carolina	1.40	1.32	1.33	1.35	1.47	1.62	1.65	1.97	2.13
South Dakota	0.99	0.99	1.01	1.04	1.10	1.13	1.19	1.29	1.40
Tennessee	0.90	0.88	0.89	0.91	0.98	1.02	1.08	1.17	1.29
Texas	0.87	0.87	0.90	0.92	0.99	1.01	1.04	1.17	1.52
Utah	0.68	0.74	0.83	0.85	0.87	0.90	0.99	1.07	1.22
Vermont	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Virginia	1.46	1.44	1.43	1.49	1.52	1.60	1.68	1.87	2.24
Washington	1.48	1.43	1.36	1.40	1.43	1.47	1.55	1.77	2.27
West Virginia	0.84	0.87	0.88	0.89	0.94	0.96	0.97	1.10	1.45
Wisconsin	1.02	1.10	1.16	1.25	1.26	1.34	1.43	1.50	1.75
Wyoming	0.66	0.67	0.68	0.68	0.71	0.74	0.77	0.85	1.02
TOTAL	1.04	1.04	1.05	1.09	1.15	1.21	1.29	1.43	1.71

NA Not Available
(1) Included in Maryland averages.
(2) Averages include New Hampshire and Vermont.
(3) Averages include the District of Columbia.
(4) Included in Maine averages.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE
(In Dollars per Thousand of Cubic Feet)

State	1976	1977	1978	1979	1980	1981	1982	1983	1984
Alabama	1.99	2.31	2.71	3.65	4.04	4.77	5.58	6.22	6.26
Alaska	1.65	1.71	1.76	1.71	1.73	1.95	1.79	2.33	2.49
Arizona	2.12	2.61	3.07	3.50	4.05	4.63	5.92	6.63	7.16
Arkansas	1.23	1.98	1.96	1.57	2.47	3.04	3.82	4.40	4.37
California	1.77	1.89	1.99	2.47	3.51	3.74	4.43	5.41	5.84
Colorado	1.27	1.62	1.94	2.48	3.23	4.17	4.89	5.51	5.24
Connecticut	3.41	4.34	4.47	4.74	5.84	6.85	8.51	9.70	8.80
Delaware	2.61	3.25	4.06	4.03	4.30	5.53	6.04	6.59	6.67
District of Columbia	(1)	(1)	(1)	(1)	4.57	5.50	6.64	8.10	8.05
Florida	2.81	3.53	3.54	3.70	4.80	5.31	6.59	6.85	7.18
Georgia	1.69	1.97	2.33	2.88	3.67	4.34	5.33	6.10	6.41
Hawaii	NA	NA	NA	NA	12.99	15.57	15.70	16.46	17.36
Idaho	2.24	2.86	3.41	3.73	4.97	5.57	6.92	7.38	6.89
Illinois	1.90	2.21	2.50	3.01	3.61	4.05	4.73	5.46	5.37
Indiana	1.69	2.02	2.17	2.65	3.15	3.60	4.38	5.49	5.69
Iowa	1.61	1.93	2.25	2.68	3.19	3.89	4.69	5.52	5.56
Kansas	1.48	1.73	1.77	1.95	2.36	3.03	4.06	4.68	4.49
Kentucky	1.32	1.79	1.94	2.35	3.03	3.49	4.46	5.30	5.20
Louisiana	1.57	1.97	2.47	2.71	3.40	4.15	5.32	6.12	5.96
Maine	2.68(2)	3.62(2)	3.57(2)	4.10(2)	6.34	7.45	8.63	9.82	9.58
Maryland	2.57(3)	3.18(3)	3.40(3)	3.76(3)	4.46	5.07	6.12	7.42	7.44
Massachusetts	3.64	3.95	4.17	4.55	5.42	6.37	7.54	8.32	7.83
Michigan	1.90	2.22	2.31	2.64	3.19	3.84	4.79	5.84	5.97
Minnesota	1.74	2.13	2.41	2.86	3.22	4.09	4.96	5.90	6.00
Mississippi	1.71	2.11	2.40	2.83	3.47	3.99	4.93	5.88	5.52
Missouri	1.70	2.18	2.29	2.75	3.28	4.02	5.20	6.12	5.85
Montana	1.36	1.82	1.89	2.21	3.05	3.75	4.45	4.62	4.86
Nebraska	1.37	1.80	1.97	2.30	2.72	3.45	4.15	4.95	5.09
Nevada	2.04	2.78	2.80	2.83	4.06	4.84	5.56	6.81	6.95
New Hampshire	(4)	(4)	(4)	(4)	4.66	5.68	6.85	7.47	7.02
New Jersey	3.14	3.42	3.53	4.30	5.06	5.87	7.03	7.43	7.30
New Mexico	1.36	2.11	2.50	2.73	3.32	3.86	4.94	5.50	5.90
New York	2.87	3.28	3.68	4.12	4.95	5.50	6.51	7.87	7.64
North Carolina	2.13	2.81	3.00	3.52	4.11	5.17	5.73	6.65	6.68
North Dakota	1.79	2.11	2.33	2.88	3.85	4.28	4.61	5.56	6.38
Ohio	1.77	2.21	2.43	2.81	3.54	3.97	4.96	6.08	6.07
Oklahoma	1.50	1.78	1.93	2.20	2.46	2.94	3.53	4.33	4.56
Oregon	2.68	3.43	3.83	4.12	5.60	6.06	6.92	7.23	7.18
Pennsylvania	2.14	2.51	2.63	3.19	3.80	4.51	5.42	6.44	6.56
Rhode Island	3.36	4.23	4.18	3.67	5.69	6.61	7.95	8.66	7.50
South Carolina	2.29	2.87	3.00	3.50	4.19	4.90	5.51	6.38	6.62
South Dakota	1.50	1.83	2.10	2.61	3.13	3.91	4.71	5.59	6.16
Tennessee	1.61	2.09	2.14	2.37	2.89	3.44	4.32	5.26	5.04
Texas	1.99	2.39	2.73	3.21	3.40	4.20	5.21	5.55	5.82
Utah	1.38	1.64	1.93	2.22	2.74	3.23	3.41	4.26	5.68
Vermont	(4)	(4)	(4)	(4)	6.22	7.00	7.24	6.79	6.30
Virginia	2.54	3.03	3.27	3.71	4.26	4.66	6.02	7.03	6.99
Washington	2.70	3.12	3.48	3.95	5.31	6.02	6.87	6.87	6.84
West Virginia	1.67	2.55	2.61	2.93	3.59	4.24	5.20	6.00	6.12
Wisconsin	2.11	2.50	2.68	3.06	3.83	4.77	5.64	6.48	6.51
Wyoming	1.18	1.59	1.91	2.51	2.81	3.51	4.53	5.13	5.84
TOTAL	1.98	2.35	2.56	2.98	3.68	4.29	5.17	6.06	6.12

NA	Not Available
(1)	Included with Maryland averages.
(2)	Averages include New Hampshire and Vermont.
(3)	Averages include the District of Columbia.
(4)	Included in Maine averages.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

Section XIII
Table 13b

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE
(In Dollars per Thousand Cubic Feet)

State	1985	1986	1987
Alabama	6.41	6.52	6.64
Alaska	2.81	3.25	3.21
Arizona	7.00	6.28	6.11
Arkansas	4.43	4.83	4.63
California	5.72	5.14	5.26
Colorado	5.10	5.01	4.74
Connecticut	9.15	8.83	8.21
Delaware	7.06	7.09	6.32
District of Columbia	7.91	7.52	7.09
Florida	7.46	7.20	7.48
Georgia	6.60	6.63	6.34
Hawaii	18.12	16.09	15.90
Idaho	6.89	6.02	5.50
Illinois	5.55	5.07	4.81
Indiana	5.54	5.52	4.95
Iowa	5.39	5.12	4.75
Kansas	4.12	3.89	4.09
Kentucky	5.31	4.93	4.53
Louisiana	5.67	5.77	5.56
Maine	9.07	8.51	8.04
Maryland	7.25	6.88	6.37
Massachusetts	7.83	7.41	6.64
Michigan	6.29	5.74	5.46
Minnesota	5.80	5.28	4.58
Mississippi	5.46	5.59	6.10
Missouri	5.49	5.03	4.76
Montana	4.81	4.45	4.41
Nebraska	5.01	4.59	4.36
Nevada	7.04	5.96	5.31
New Hampshire	7.15	7.07	6.50
New Jersey	7.49	7.35	6.60
New Mexico	6.08	5.72	4.98
New York	7.74	7.46	6.88
North Carolina	6.60	6.62	6.66
North Dakota	5.59	5.29	5.47
Ohio	6.04	5.80	5.35
Oklahoma	4.58	5.01	4.63
Oregon	6.93	6.61	6.62
Pennsylvania	6.72	6.39	6.03
Rhode Island	7.87	7.46	6.81
South Carolina	6.62	6.54	6.59
South Dakota	5.75	5.26	4.87
Tennessee	5.12	4.97	4.68
Texas	5.77	5.31	5.20
Utah	4.86	4.64	4.97
Vermont	6.28	6.28	6.23
Virginia	7.02	6.49	5.86
Washington	6.60	5.93	5.42
West Virginia	6.39	6.34	5.98
Wisconsin	6.47	6.20	6.00
Wyoming	5.17	4.93	4.70
TOTAL	6.12	5.83	5.54

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annual.

Section XIII
Table 14

HISTORICAL U.S. GROSS AND MARKETED PRODUCTION OF NATURAL GAS: 1935-1946
(Millions of Cubic Feet)

Year	Gross Production	Repressuring	Vented and Flared(1)	Marketed Production(2)
1935	2,498,005	90,290	479,826	1,927,889
1936	2,633,835	73,507	392,528	2,178,800
1937	3,032,410	84,925	526,159	2,421,326
1938	3,061,200	101,551	649,106	2,310,543
1939	3,333,500	171,401	677,311	2,484,788
1940	3,694,100	362,916	655,967	2,675,217
1941	4,103,500	644,379	630,212	2,828,909
1942	4,453,900	752,619	626,782	3,074,499
1943	5,160,650	824,803	902,115	3,433,642
1944	5,614,220	882,979	1,010,285	3,720,956
1945	5,902,180	1,061,951	896,208	3,944,021
1946	6,190,200	1,038,242	1,102,033	4,049,925

(1) Partly estimated; includes direct losses on producing properties and residue blown to the air.
(2) Marketed production equals gross production, less amounts used for repressuring, vented and flared.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys, "Natural Gas" Annuals.

BASIC PETROLEUM DATA BOOK

SECTION XIV. OPEC

Table 1. OPEC Crude Oil Reserves

Table 2 OPEC Crude Oil Production

Table 3. U.S. Total Petroleum Imports From OPEC Nations

Table 4. U.S. Crude Oil Imports From OPEC Nations

Table 5. OPEC Refinery Capacity

Table 6. OPEC's Values of Petroleum Exports

Table 7. OPEC Marketed Production of Natural Gas

Section XIV
Table 1

OPEC CRUDE OIL RESERVES
ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC
1960	50,000	62,000	6,500	35,000	25,000	18,000	-	-	-	-	-	-	-	-	196,500
1961	50,000	62,000	6,000	35,000	27,000	18,500	2,500	-	-	-	-	-	-	-	201,000
1962	52,000	62,000	6,000	35,000	26,500	17,550	2,750	3,000	9,500	-	-	-	-	-	214,300
1963	52,000	63,000	7,500	37,000	26,000	17,000	3,000	4,500	10,000	-	-	-	-	-	220,000
1964	60,000	63,500	10,000	37,000	25,500	17,000	2,950	7,000	10,000	-	-	-	-	-	232,950
1965	60,500	63,000	12,500	38,000	25,000	17,000	3,500	9,000	10,000	-	-	-	-	-	238,500
1966	60,000	62,500	12,400	40,000	25,000	17,250	3,000	10,000	9,500	-	-	-	-	-	239,650
1967	66,000	68,700	13,000	44,200	24,000	17,400	4,000	20,000	9,100	12,500	-	-	-	-	278,900
1968	74,700	70,000	13,500	43,800	23,500	17,000	3,750	29,200	9,000	15,000	-	-	-	-	299,450
1969	77,000	69,000	15,000	54,000	28,000	15,500	3,875	30,000	8,850	18,000	7,000	-	-	-	326,225
1970	140,000	68,000	13,000	55,000	27,500	14,750	5,500	35,000	9,000	16,000	8,000	-	-	-	391,750
1971	128,500	67,100	25,700	70,000	32,000	14,000	4,300	29,200	10,000	11,800	30,000(10)	9,300	-	-	431,900
1972	145,300	66,023	24,350	55,500	35,900	13,900	6,000	25,000	10,400	18,948	12,250	11,680	-	-	425,251
1973	138,000	64,900	16,000	65,000	29,000	13,700	7,000	30,400	10,005	20,768	47,000	15,000	5,750	1,100	463,623
1974	132,000	64,000	17,500	60,000	31,500	14,000	6,500	25,500	10,500	25,500	7,640	20,000	5,675	1,500	421,815
1975	164,500	72,800	17,300	66,000	35,000	15,000	6,000	26,600	15,000	33,920	7,700	20,900	2,500	1,750	484,970
1976	148,600	68,000	6,400	64,500	34,300	17,700	5,850	26,100	14,000	32,200	7,370	20,200	2,450	2,200	449,879
1977	151,400	67,400	6,300	63,000	34,000	15,270	5,700	25,500	10,500	31,200	6,800	19,500	1,700	2,125	440,395
1978	150,000	67,000	6,200	62,000	34,500	18,200	5,600	25,000	10,000	32,425	6,600	18,700	1,640	2,050	439,915
1979	165,700	66,200	6,480	59,000	32,100	18,000	4,000	24,300	10,200	31,316	6,300	18,200	1,170	1,970	444,936
1980	163,350	65,400	6,260	58,000	31,000	17,870	3,760	23,500	9,600	29,411	8,440	17,400	1,100	500	435,591
1981	165,000	64,900	6,060	57,500	30,000	17,950	3,585	23,000	9,500	30,410	8,200	16,700	1,100	450	434,355
1982	164,600	64,480	6,500	57,000	29,700	20,300	3,434	22,600	9,800	32,176	8,080	16,500	850	480	436,500
1983	162,400	64,230	5,840	55,308	41,000	21,500	3,425	21,500	9,550	32,354	9,440	16,750	1,400	460	445,157
1984	166,000	63,900	5,695	51,000	43,000	24,850	3,330	21,370	9,100	32,240	9,220	16,550	1,675	490	448,320
1985	169,000	90,000	5,420	48,500	44,500	25,845	3,350	21,100	8,650	32,390	9,000	16,650	1,400	510	476,215
1986	168,800	89,774	5,380	47,876	44,110	25,591	3,300	21,300	8,500	32,890	8,820	16,600	1,650	525	475,110
1987	166,574	91,916	5,212	48,800	47,100	25,500	3,154	21,300	8,300	33,050	8,800	16,000	1,672	645	478,023
1988	166,980	91,920	5,210	92,850	100,000	56,300	3,150	21,000	8,400	97,705	8,500	15,980	1,615	645	670,250
1989	169,970	91,920	5,210	92,850	100,000	58,084	3,150	22,000	8,250	97,705	8,400	16,000	1,350	720	675,609

(1) Original member 1960.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on a 50-50 basis.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. Figures reflect only Abu Dhabi reserves until 1974 when membership was transferred to the United Arab Emirates which includes Dubai and Sharjah.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Government estimate

SOURCE:" Oil and Gas Journal, "Worldwide Report" issue

Section XIV
Table 2

OPEC CRUDE OIL PRODUCTION
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC
1960	1,247	1,624	136	1,054	967	2,846	-	-	-	-	-	-	-	-	7,874
1961	1,393	1,644	179	1,183	1,002	2,920	176	-	-	-	-	-	-	-	8,497
1962	1,521	1,834	244	1,320	1,005	3,200	186	184	460	-	-	-	-	-	9,954
1963	1,629	1,933	314	1,474	1,159	3,248	192	464	452	-	-	-	-	-	10,865
1964	1,716	2,117	359	1,691	1,262	3,393	213	862	469	-	-	-	-	-	12,082
1965	2,025	2,170	362	1,886	1,322	3,473	231	1,220	488	-	-	-	-	-	13,177
1966	2,393	2,275	420	2,113	1,385	3,371	290	1,507	463	-	-	-	-	-	14,217
1967	2,598	2,292	415	2,596	1,228	3,542	324	1,744	507	384	-	-	-	-	15,631
1968	2,830	2,421	428	2,840	1,499	3,605	340	2,599	601	497	-	-	-	-	17,660
1969	2,993	2,575	447	3,375	1,521	3,649	383	3,111	742	599	946	-	-	-	20,341
1970	3,549	2,735	504	3,829	1,558	3,708	363	3,313	854	691	1,030	-	-	-	22,134
1971	4,498	2,925	545	4,553	1,710	3,549	429	2,761	892	934	766	1,530	-	-	25,092
1972	5,733	2,999	566	5,024	1,447	3,220	482	2,239	1,081	1,050	1,052	1,818	-	-	26,711
1973	7,335	2,759	523	5,861	2,018	3,366	570	2,175	1,338	1,533	1,097	2,054	209	151	30,989
1974	8,210	2,276	543	6,022	1,975	2,976	519	1,521	1,375	1,689	1,009	2,256	174	202	30,747
1975	6,827	1,838	496	5,350	2,262	2,346	437	1,510	1,307	1,694	961	1,786	161	225	27,200
1976	8,344	1,913	469	5,924	2,281	2,294	487	1,924	1,504	1,891	1,049	2,066	188	224	30,558
1977	9,014	1,783	372	5,699	2,493	2,238	445	2,064	1,685	1,999	1,123	2,097	183	222	31,417
1978	8,530	1,865	466	5,207	2,629	2,166	484	1,993	1,637	1,832	1,225	1,910	202	225	30,371
1979	9,251	2,213	568	3,168	3,477	2,356	508	2,092	1,591	1,831	1,137	2,302	214	203	30,911
1980	9,631	1,389	544	1,662	2,514	2,165	471	1,830	1,576	1,702	1,020	2,058	204	175	26,941
1981	9,625	947	370	1,381	993	2,108	405	1,137	1,604	1,500	803	1,445	211	151	22,680
1982	6,327	663	317	2,282	972	1,893	328	1,183	1,314	1,248	701	1,298	211	154	18,891
1983	4,867	881	390	2,492	922	1,781	295	1,076	1,385	1,119	699	1,241	236	157	17,541
1984	4,444	912	410	2,187	1,203	1,813	399	1,073	1,466	1,097	638	1,393	253	152	17,440
1985	3,290	862	355	2,258	1,437	1,621	302	1,069	1,235	1,146	645	1,464	280	153	16,117
1986	4,935	1,344	332	1,929	1,746	1,576	342	1,137	1,264	1,331	671	1,461	289	180	18,537
1987	4,067	1,034	391	2,451	2,076	1,572	308	972	1,191	1,454	635	1,286	167	156	17,760

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(1) Original member 1960.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on a 50-50 basis.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. Figures reflect only Abu Dhabi production until 1974 when membership was transferred to the United Arab Emirates which includes Dubai and Sharjah.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.

Source: U.S. Energy Information Administration
1979-1987: CIA, International Energy Statistical Review

Section XIV
Table 3

U.S. TOTAL PETROLEUM IMPORTS FROM OPEC NATIONS
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC	Total U.S. Petroleum Imports
1960	79	146	45	36	17	832	-	-	-	8	-	-	-	-	1,155	1,815
1961	69	130	53	60	25	800	36	-	-	-	-	-	-	-	1,173	1,917
1962	73	120	43	49	2	907	27	19	67	-	-	-	-	-	1,307	2,082
1963	86	89	44	62	1	899	17	19	59	-	-	-	-	-	1,276	2,123
1964	106	69	48	66	-	931	20	39	63	-	-	-	-	-	1,342	2,258
1965	144	60	27	79	16	994	13	41	61	-	-	-	-	-	1,435	2,468
1966	135	31	19	89	26	1,021	1	69	50	-	-	-	-	-	1,441	2,573
1967	86	23	11	71	5	935	-	42	62	5	-	-	-	-	1,240	2,537
1968	60	48	29	61	-	888	-	114	73	15	-	-	-	-	1,288	2,840
1969	42	39	43	46	-	876	1	135	89	14	2	-	-	-	1,287	3,166
1970	42	36	-	38	-	989	-	47	70	63	8	-	-	-	1,293	3,419
1971	127	36	-	112	11	1,019	-	57	111	80	15	103	-	-	1,671	3,925
1972	190	45	-	142	4	960	3	123	164	73	92	251	-	-	2,047	4,741
1973	486	47	-	223	4	1,135	7	164	213	71	135	459	48	-	2,992	6,256
1974	461	5	-	469	-	979	17	4	300	74	190	713	42	23	3,277	6,112
1975	715	15	-	280	3	698	18	232	388	117	282	762	57	27	3,594	6,025
1976	1,230	5	-	298	26	699	24	453	539	254	432	1,025	51	28	5,064	7,295
1977	1,380	48	-	535	73	690	67	723	541	335	559	1,143	57	42	6,193	8,807
1978	1,144	6	-	555	62	645	64	654	573	385	649	919	54	41	5,751	8,363
1979	1,356	8	-	304	88	690	31	658	420	281	636	1,080	42	42	5,636	8,456
1980	1,261	25	-	9	28	481	22	554	348	172	488	857	27	26	4,298	6,909
1981	1,129	-	-	-	(10)	406	7	319	366	81	311	620	48	35	3,324	5,996
1982	552	5	-	35	3	412	7	26	248	92	170	514	42	40	2,145	5,113
1983	337	14	-	48	10	422	-	-	338	30	240	302	61	59	1,863	5,051
1984	325	36	-	10	12	548	5	1	343	117	323	216	55	58	2,049	5,437
1985	168	21	-	27	46	605	-	4	314	45	187	293	67	52	1,830	5,067
1986	685	68	-	19	81	793	13	-	318	44	271	440	77	26	2,836	6,224
1987	751	84	-	98	83	804	-	-	285	61	295	535	29	35	3,061	6,678

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(1) Original member 1960.
(2) In 1969, Saudi Arabia and Kuwait agreed to a boundary for administration of the Neutral Zone which had been in dispute until that time. Natural resources from the area were to be shared equally.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. In 1972, Abu Dhabi together with Dubai, Sharjah and several other sheikdoms formed the United Arab Emirates. Abu Dhabi's membership in OPEC was transferred to the other members of the U.A.E. in 1974.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Less than 500 barrels per day.

Source: U.S. Energy Information Administration. P.A.D. District Supply/Disposition Annual
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals

U.S. CRUDE OIL IMPORTS FROM OPEC NATIONS
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC	Total U.S. Crude Oil Imports
1960	77	130	45	36	17	472	-	-	-	-	-	-	-	-	777	1,015
1961	62	121	53	60	20	427	10	-	-	-	-	-	-	-	753	1,045
1962	67	112	43	49	2	463	26	18	67	-	-	-	-	-	847	1,126
1963	79	81	44	62	1	478	16	19	59	-	-	-	-	-	839	1,131
1964	97	64	48	66	-	476	20	39	63	-	-	-	-	-	873	1,198
1965	132	55	27	78	16	432	12	41	61	-	-	-	-	-	854	1,238
1966	126	26	19	84	26	404	1	69	50	-	-	-	-	-	805	1,225
1967	81	19	11	65	5	359	-	42	62	5	-	-	-	-	649	1,128
1968	52	43	29	58	-	344	-	114	73	15	-	-	-	-	728	1,290
1969	35	34	43	42	-	306	1	134	89	14	1	-	-	-	699	1,490
1970	40	33	-	33	-	268	-	47	70	63	6	-	-	-	560	1,324
1971	115	29	-	106	11	303	-	53	110	80	13	95	-	-	915	1,681
1972	174	36	-	136	4	255	3	109	163	73	87	243	-	-	1,283	2,216
1973	462	42	-	217	4	344	7	133	200	71	119	448	47	-	2,094	3,244
1974	438	5	-	463	-	319	17	4	284	69	180	697	42	23	2,541	3,477
1975	701	4	-	278	2	395	18	223	379	117	264	746	57	27	3,211	4,105
1976	1,222	1	-	298	26	241	24	444	536	255	408	1,014	51	26	4,546	5,287
1977	1,369	42	-	525	76	249	67	696	502	331	538	1,123	54	35	5,607	6,568
1978	1,142	5	-	554	62	181	64	638	533	385	634	910	38	38	5,184	6,356
1979	1,347	5	-	297	88	293	31	642	380	281	608	1,069	30	42	5,113	6,519
1980	1,250	27	-	8	28	156	22	548	314	172	456	841	17	25	3,864	5,263
1981	1,112	-	-	-	-	147	7	317	318	77	261	611	38	35	2,922	4,396
1982	530	2	-	35	3	155	7	23	226	81	90	510	32	40	1,734	3,488
1983	321	7	-	48	10	164	-	-	315	18	176	301	56	59	1,477	3,329
1984	309	24	-	10	12	253	4	-	304	90	194	207	47	57	1,511	3,426
1985	132	4	-	27	46	306	-	-	292	35	84	280	56	51	1,312	3,201
1986	618	28	-	19	81	416	12	-	297	38	78	437	64	25	2,113	4,178
1987	642	70	-	98	82	488	-	-	262	56	115	529	23	35	2,400	4,674

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(1) Original member 1960.
(2) In 1969, Saudi Arabia and Kuwait agreed to a boundary for administration of the Neutral Zone which had been in dispute until that time. Natural resources from the area were to be shared equally.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. In 1972, Abu Dhabi together with Dubai, Sharjah and several other sheikdoms formed the United Arab Emirates. Abu Dhabi's membership in OPEC was transferred to the other members of the U.A.E. in 1974.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Includes crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Energy Information Administration, Petroleum Statement, Annual and December issues
1981-1987: U.S. Energy Information Administration, Petroleum Supply Annuals

Section XIV
Table 5

OPEC REFINERY CAPACITY
(Thousands of Barrels per Day)

Country	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Algeria	43.7	57.5	57.5	57.5	57.5	57.5	57.5	115.8	115.8	115.8	115.8	115.8
Ecuador	18.2	10.9	19.4	34.5	34.5	34.5	35.5	35.5	35.5	43.9	43.9	43.9
Gabon	--	--	11.9	11.9	14.0	16.0	17.0	17.0	17.0	17.0	20.0	44.0
Indonesia	236.9	241.4	251.2	251.2	256.0	283.5	361.3	361.3	361.3	361.3	361.3	473.4
Iran	466.5	524.2	524.2	594.0	594.0	594.0	605.0	605.0	660.0	690.0	810.0	810.0
Iraq	81.7	81.7	97.7	102.7	102.7	115.7	115.7	115.7	183.5	253.5	253.5	253.5
Kuwait	342.0	342.0	342.0	437.0	437.0	437.0	437.0	484.5	541.5	541.5	609.0	609.0
Libya	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	63.0	63.0	63.0
Nigeria	30.3	30.3	40.0	40.0	40.0	52.1	54.0	54.0	54.0	54.0	54.0	54.0
Qatar	.6	.7	.7	.7	.7	.7	.7	.7	.7	.7	9.7	9.7
Saudi Arabia	302.5	335.0	335.0	347.0	347.0	676.0	676.0	676.0	676.0	676.0	703.0	703.0
United Arab Emirates	--	--	--	--	--	--	--	--	--	--	--	15.0
Venezuela	1,119.8	1,134.5	1,216.8	1,222.2	1,258.0	1,289.4	1,294.9	1,473.9	1,473.9	1,444.9	1,444.9	1,444.9
TOTAL OPEC	2,651.2	2,767.2	2,905.4	3,107.7	3,150.4	3,565.4	3,663.6	3,948.4	4,128.2	4,290.6	4,488.1	4,637.7

Source: OPEC Annual Statistical Bulletin

Section XIV
Table 5a

OPEC REFINERY CAPACITY
(Thousands of Barrels per Day)

Country	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Algeria	115.8	115.8	135.1	471.2	471.2	471.2	471.2	471.2	471.2	471.2
Ecuador	99.5	99.5	94.5	94.5	94.5	94.5	94.6	94.6	94.6	94.6
Gabon	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	21.0
Indonesia	473.4	473.4	473.4	473.4	473.4	473.4	837.0	837.0	837.0	837.0
Iran	1,050.0	1,080.0	1,080.0	1,320.0	1,320.0	670.0	670.0	615.0	615.0	615.0
Iraq	253.5	295.5	305.5	305.5	305.5	215.5	365.5	365.5	365.5	365.5
Kuwait	594.0	594.0	594.0	594.0	594.0	594.0	614.0	614.0	614.0	720.0
Libya	117.0	117.0	117.0	117.0	117.0	117.0	117.0	315.0	333.0	342.0
Nigeria	54.0	144.0	144.0	234.0	234.0	234.0	234.0	234.0	234.0	243.0
Qatar	9.7	9.7	10.5	10.5	10.5	12.2	62.2	62.2	63.0	63.0
Saudi Arabia	703.0	758.0	758.0	645.0	765.0	765.0	935.0	1,190.0	1,440.0	1,490.0
United Arab Emirates	13.5	13.5	13.5	13.5	121.5	121.5	175.5	162.0	162.0	162.0
Venezuela	1,444.9	1,444.9	1,444.9	1,444.9	1,444.9	1,323.1	1,323.1	1,224.2	1,229.2	1,224.2
TOTAL OPEC	4,972.3	5,189.3	5,214.4	5,767.5	5,995.5	5,136.2	5,943.9	6,229.5	6,479.5	6,648.5

Source: OPEC Annual Statistical Bulletin 1986.

Section XIV
Table 6

OPEC'S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1966	1967	1968	1969	1970	1971	1972	1973	1974
Algeria	$ 508	$ 532	$ 589	$ 631	$ 681	$ 614	$ 1,028	$ 1,522	$ 4,267
Ecuador	1	1	1	1	1	1	59	282	693
Gabon	14	32	38	53	58	82	93	196	709
Indonesia	203	240	298	383	446	565	913	1,609	5,211
Iran	1,148	1,748	1,688	1,857	2,358	3,494	3,636	5,617	20,904
Iraq	698	610	755	769	788	1,083	1,027	1,842	6,534
Kuwait	808	803	860	910	1,596	2,143	2,370	3,520	10,394
Libya	1,002	1,169	1,857	2,159	2,357	2,699	2,888	3,919	8,175
Nigeria	260	204	104	367	715	1,342	1,796	2,905	8,619
Qatar	180	202	211	223	228	302	382	601	1,979
Saudi Arabia	1,298	1,384	2,020	2,107	2,418	3,803	5,477	8,956	35,476
United Arab Emirates	247	258	342	412	485	801	1,035	1,740	6,306
Venezuela	2,190	2,307	2,330	2,279	2,371	2,882	2,857	4,329	10,548
TOTAL OPEC	8,558	9,491	11,093	12,152	14,501	19,811	23,561	37,035	119,814

Source: OPEC Annual Statistical Bulletin 1986.

Section XIV
Table 6a

OPEC'S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Algeria	$ 4,295	$ 4,791	$ 5,562	$ 5,856	$ 8,746	$ 12,647	$ 12,985	$ 10,770	$ 9,467	$ 9,189
Ecuador	516	565	500	604	1,161	1,563	1,709	1,509	1,733	1,835
Gabon	841	950	927	975	1,265	1,876	1,723	1,720	1,500	1,767
Indonesia	5,310	6,004	7,298	7,439	8,871	15,595	18,164	15,223	13,558	12,477
Iran	19,634	22,923	23,599	21,684	19,186	13,386	12,053	19,233	19,225	12,255
Iraq	8,227	9,201	9,560	10,913	21,382	26,296	10,422	10,104	9,900	11,992
Kuwait	8,424	8,953	8,778	9,422	16,770	17,678	13,790	8,827	9,948	10,889
Libya	6,677	9,399	11,220	9,681	15,693	21,396	14,531	13,250	11,905	10,739
Nigeria	7,569	9,943	11,046	8,986	16,303	25,277	17,582	12,835	10,231	11,712
Qatar	1,757	2,137	1,987	2,295	3,658	5,428	5,372	4,125	3,123	4,287
Saudi Arabia	29,473	38,157	43,308	40,332	62,855	108,174	118,998	78,119	44,832	36,263
United Arab Emirates	6,807	8,384	9,290	8,675	12,913	19,496	19,270	16,837	13,811	13,677
Venezuela	8,324	8,763	9,110	8,740	13,633	18,248	19,039	15,625	13,839	12,145
TOTAL OPEC	107,854	130,170	142,185	135,602	202,433	286,959	265,637	208,177	163,069	149,226

Source: OPEC Annual Statistical Bulletin 1986.

OPEC'S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1985	1986
Algeria	$ 9,170	$ 3,760
Ecuador	1,927	983
Gabon	1,668	848
Indonesia	9,083	5,451
Iran	13,115	6,600
Iraq	11,380	6,980
Kuwait	9,729	6,200
Libya	10,520	4,700
Nigeria	12,338	6,300
Qatar	3,355	1,460
Saudi Arabia	25,936	21,190
United Arab Emirates	13,395	5,890
Venezuela	10,352	6,713
TOTAL OPEC	131,967	77,073

Source: OPEC Annual Statistical Bulletin 1986.

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Algeria	1,780	1,961	2,128	2,357	2,972	2,599	6,573	4,092	3,196	3,807	7,516
Ecuador	--	--	--	14	14	14	14	17	28	28	31
Gabon	11	11	17	24	22	32	31	34	283	637	262
Indonesia	3,156	510	623	633	1,193	1,239	1,253	1,229	800	1,127	2,322
Iran	1,242	1,404	2,850	4,370	4,944	12,881	14,278	16,342	17,789	20,661	20,282
Iraq	498	607	484	485	762	784	925	935	910	836	1,299
Kuwait	1,817	2,380	2,780	3,339	3,727	2,037	2,104	2,487	2,786	2,931	3,212
Libya	--	--	--	--	--	294	708	2,832	4,531	4,075	4,635
Nigeria	98	176	181	147	64	111	184	273	303	404	402
Qatar	81	82	113	514	852	1,005	1,005	1,103	1,580	1,298	2,003
Saudi Arabia	1,031	1,133	1,136	1,639	1,744	1,230	1,378	1,178	2,316	3,835	3,772
United Arab Emirates	--	--	454	600	569	756	1,045	1,038	1,251	1,199	1,090
Venezuela	7,034	5,983	6,300	6,850	7,065	7,710	7,472	7,427	9,149	9,669	9,404
TOTAL OPEC	16,748	14,247	16,994	20,972	23,928	30,692	36,970	38,987	44,922	50,507	56,230

SOURCE: OPEC Annual Statistical Bulletin

Section XIV
Table 7a

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Algeria	7,585	5,738	8,078	15,548	11,647	21,862	26,686	36,267	35,039	36,470
Ecuador	31	40	40	35	31	55	73	85	81	78
Gabon	169	177	165	150	159	143	150	118	71	80
Indonesia	2,338	5,652	10,865	15,765	18,503	18,775	19,076	21,992	32,969	34,810
Iran	19,997	18,852	16,948	17,913	7,138	5,950	7,200	11,000	13,500	14,600
Iraq	1,802	1,178	1,221	1,751	1,281	620	680	470	590	850
Kuwait	3,864	4,213	4,721	6,251	4,071	4,684	3,675	4,035	4,376	4,200
Libya	4,779	5,051	5,121	6,785	5,170	3,150	3,350	3,710	4,600	5,200
Nigeria	632	500	380	1,378	1,070	2,155	1,413	2,298	2,051	2,800
Qatar	1,094	1,551	1,479	4,362	4,741	4,323	5,055	5,235	5,930	5,460
Saudi Arabia	4,434	5,565	7,297	9,167	11,431	22,245	8,950	4,380	18,200	18,800
United Arab Emirates	1,371	3,796	5,164	5,431	6,863	9,075	8,320	8,400	11,060	13,210
Venezuela	11,658	12,729	12,523	14,382	14,805	14,886	15,883	15,640	17,300	17,326
TOTAL OPEC	59,754	65,042	74,002	98,918	86,910	107,923	100,511	113,630	145,767	153,884

Source: OPEC Annual Statistical Bulletin 1986.

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1986
Algeria	40,000
Ecuador	80
Gabon	90
Indonesia	36,290
Iran	15,200
Iraq	1,320
Kuwait	4,900
Libya	6,300
Nigeria	3,299
Qatar	5,480
Saudi Arabia	25,200
United Arab Emirates	15,180
Venezuela	19,074
TOTAL OPEC	172,413

Source: OPEC Annual Statistical Bulletin 1986.

BASIC PETROLEUM DATA BOOK

SECTION XV. MISCELLANEOUS

Table 1. Estimated Average Number of Employees in Important Segments of the Petroleum Industry

Table 2. U.S. Service Station Population by State

Table 3. Conversion Table

Table 4. Heat Values for Various Energy Products

Table 5. U.S. Petroleum Industry Injury Frequency Rates by Industry Sector

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Table 7. Map--Petroleum Administration for Defense (PAD) Districts

Table 8. Heating Equipment and Fuels for Occupied Housing Units

Section XV
Table 1

ESTIMATED AVERAGE NUMBER OF EMPLOYEES IN IMPORTANT SEGMENTS OF THE PETROLEUM INDUSTRY IN 1987

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Alabama	1,312	423	100	83	3,123	5,116	7,951	18,108
Alaska	8,063	261	0	922	244	530	1,069	11,089
Arizona	105	NA	NA	122	1,866	1,311	8,662	12,066
Arkansas	2,576	NA	NA	NA	2,154	2,795	5,330	12,855
California	32,282	24,007	863	1,184	11,455	14,999	63,918	148,708
Colorado	14,300	586	1,004	92	2,036	2,216	8,271	28,505
Connecticut	150	NA	88	NA	1,290	1,600	9,364	12,492
Delaware	0	772	9	4	316	268	1,475	2,844
Florida	680	46	207	70	2,140	6,630	29,777	39,550
Georgia	71	94	137	466	4,161	5,829	17,508	28,266
Hawaii	NA	432	0	0	343	591	3,615	4,981
Idaho	18	0	0	16	332	1,401	3,051	4,818
Illinois	3,799	8,074	271	891	7,865	9,408	25,922	56,230
Indiana	599	2,316	295	410	2,946	3,284	17,537	27,387
Iowa	29	0	53	154	1,265	3,155	12,256	16,912
Kansas	9,733	2,302	365	1,820	2,896	2,247	8,543	27,906
Kentucky	2,290	3,683	114	140	3,241	3,055	10,374	22,897
Louisiana	51,600	11,200	800	1,000	6,200	5,300	7,600	83,700
Maine	NA	0	0	NA	NA	1,329	3,297	4,626
Maryland	35	NA	NA	0	NA	2,675	13,450	16,160
Massachusetts	290	NA	377	NA	4,957	2,694	15,708	24,026
Michigan	4,216	1,615	781	279	6,811	5,829	23,367	42,898
Minnesota	NA	NA	157	194	2,257	2,580	16,606	21,794
Mississippi	5,359	1,534	112	0	2,124	2,964	5,905	17,998
Missouri	63	11	411	230	4,867	6,020	19,056	30,658
Montana	2,010	765	1	78	289	1,262	3,144	7,549
Nebraska	592	NA	NA	102	2,246	1,895	6,683	11,518
Nevada	222	26	0	26	738	453	3,831	5,296
New Hampshire	1	0	3	3	260	460	2,813	3,540
New Jersey	148	6,248	983	162	2,265	3,727	18,872	32,405
New Mexico	8,893	647	32	361	3,077	2,195	4,053	19,258
New York	1,785	5,673	407	124	6,716	8,845	28,076	51,626
North Carolina	5	NA	224	121	2,665	5,905	10,888	19,808
North Dakota	2,601	221	147	158	1,045	2,210	2,390	8,772
Ohio	7,159	5,336	785	675	7,382	6,646	30,253	58,236
Oklahoma	43,438	6,635	439	1,375	5,293	4,299	7,090	68,569
Oregon	87	NA	NA	NA	NA	2,451	8,801	11,430
Pennsylvania	4,100	8,200	800	700	8,500	9,900	27,300	59,500
Rhode Island	7	NA	NA	NA	901	409	2,383	3,700
South Carolina	31	0	NA	NA	574	3,737	7,685	12,027
South Dakota	100	0	0	64	126	1,528	2,606	4,424
Tennessee	351	338	128	42	1,824	5,225	11,892	19,800

ESTIMATED AVERAGE NUMBER OF EMPLOYEES IN IMPORTANT SEGMENTS OF THE PETROLEUM INDUSTRY IN 1987

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Texas	171,253	29,665	1,147	4,708	26,710	23,101	34,045	290,629
Utah	1,903	778	11	79	2,307	1,676	5,080	11,534
Vermont	0	0	0	0	103	430	2,067	2,600
Virginia	NA	NA	55	NA	3,012	8,335	15,482	26,884
Washington	191	1,571	NA	79	NA	2,692	10,347	14,880
West Virginia	4,298	435	114	197	4,837	1,495	4,844	16,120
Wisconsin	11	136	73	164	2,848	3,343	16,455	23,030
Wyoming	8,866	905	6	241	1,065	1,030	2,894	15,007
District of Columbia	68	69	0	0	599	150	906	1,792
Total U.S.	395,690	125,095	11,499	17,436	160,271	196,925	610,492	1,517,408

NA Not Available

Note: The above estimates represent results of the Independent Petroleum Association of America's survey of State Labor Departments. The totals of these individual state estimates do not agree with totals shown by the Bureau of Labor Statistics in its "Employment and Earnings" publication due to confidentiality rules.

Section XV
Table 2

U.S. SERVICE STATION POPULATION BY STATE

	1977(1)	1980	1981	1982(1)	1983	1984	1985	1986	1987
Alabama	3,562	3,198	3,051	2,001	1,889	1,827	1,722	1,660	1,617
Alaska	211	188	179	176	166	161	152	146	142
Arizona	1,656	1,486	1,418	1,204	1,137	1,099	1,036	1,006	973
Arkansas	2,407	2,161	2,062	1,216	1,148	1,110	1,047	999	983
California	14,388	12,916	12,320	10,624	10,029	9,698	9,145	8,814	8,585
Colorado	2,485	2,230	2,127	1,570	1,482	1,433	1,351	1,302	1,269
Connecticut	2,215	1,988	1,897	1,726	1,629	1,576	1,486	1,432	1,395
Delaware	435	391	373	300	283	274	258	249	242
Dist. of Col.	250	224	214	158	149	144	136	131	128
Florida	7,287	6,541	6,240	5,504	5,196	5,024	4,738	4,566	4,448
Georgia	5,066	4,546	4,337	3,077	2,905	2,809	2,649	2,553	2,487
Hawaii	415	372	355	367	346	335	316	304	297
Idaho	830	745	711	494	466	451	425	410	399
Illinois	7,815	7,014	6,691	5,132	4,845	4,685	4,418	4,258	4,147
Indiana	4,867	4,348	4,148	3,167	2,990	2,891	2,726	2,627	2,559
Iowa	3,424	3,074	2,933	2,064	1,948	1,884	1,777	1,712	1,668
Kansas	2,466	2,214	2,112	1,511	1,426	1,379	1,301	1,254	1,221
Kentucky	3,452	3,099	2,956	2,119	2,000	1,934	1,824	1,758	1,712
Louisiana	2,989	2,683	2,560	1,972	1,862	1,800	1,698	1,636	1,594
Maine	933	838	799	640	604	584	551	531	517
Maryland	2,465	2,213	2,111	1,877	1,772	1,713	1,616	1,557	1,517
Massachusetts	3,882	3,484	3,324	2,962	2,796	2,704	2,550	2,457	2,394
Michigan	6,572	5,899	5,628	4,130	3,899	3,770	3,555	3,426	3,337
Minnesota	3,280	2,944	2,809	2,228	2,103	2,034	1,918	1,848	1,800
Mississippi	1,962	1,761	1,680	1,191	1,124	1,087	1,025	988	962
Missouri	5,008	4,497	4,290	2,944	2,779	2,687	2,534	2,442	2,379
Montana	968	868	828	528	498	482	455	438	427
Nebraska	1,732	1,555	1,483	1,129	1,066	1,031	972	937	912
Nevada	641	575	549	476	449	435	410	395	385
New Hampshire	704	632	603	547	516	499	471	454	442
New Jersey	5,350	4,802	4,581	4,157	3,924	3,795	3,578	3,449	3,359
New Mexico	1,389	1,247	1,190	780	736	712	671	647	630
New York	9,425	8,298	7,917	6,328	5,973	5,777	5,447	5,250	5,114
North Carolina	5,775	5,185	4,946	3,049	2,878	2,783	2,625	2,529	2,464
North Dakota	687	617	589	422	398	385	363	350	341
Ohio	8,820	7,916	7,552	5,704	5,573	5,389	5,082	4,898	4,771
Oklahoma	3,063	2,748	2,622	1,599	1,509	1,460	1,376	1,327	1,292
Oregon	2,185	1,962	1,872	1,492	1,408	1,362	1,284	1,238	1,206
Pennsylvania	8,994	8,073	7,702	5,781	5,457	5,277	4,976	4,796	4,672
Rhode Island	697	625	596	515	486	470	443	427	416
South Carolina	3,001	2,694	2,570	1,666	1,573	1,521	1,434	1,382	1,346
South Dakota	861	772	736	533	503	487	459	442	431
Tennessee	4,090	3,671	3,502	2,490	2,351	2,273	2,143	2,066	2,012
Texas	12,747	11,442	10,916	8,213	7,753	7,497	7,070	6,814	6,637
Utah	1,149	1,031	984	842	795	769	725	699	680
Vermont	540	484	462	359	339	328	309	298	290
Virginia	3,992	3,583	3,418	2,652	2,503	2,421	2,283	2,200	2,143
Washington	3,005	2,696	2,572	2,146	2,026	1,959	1,847	1,780	1,734
West Virginia	1,818	1,632	1,557	1,061	1,002	969	913	880	857
Wisconsin	4,043	3,629	3,462	2,701	2,550	2,466	2,325	2,241	2,183
Wyoming	647	580	553	430	406	393	370	357	347
U.S. TOTAL	176,465	158,491	151,200	116,154	109,649	106,031	99,987	96,361	93,864

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(1) Data from 1977 through 1981 represent total service stations. Data beginning in 1982 represent stations with payrolls which, by Census Bureau definition, generate more than half of their sales dollars through the sale of gasoline and oil products.

Source: 1977 and 1982: U.S. Census Bureau, Retail Trade Census
Other years: National Petroleum News estimates based on Census Bureau and other Commerce Department data.

Section XV
Table 3

THE FOLLOWING EQUIVALENTS ARE DERIVED FROM THE USE OF BRITISH THERMAL UNIT HEAT VALUES(1)

		Crude Petroleum (42 gal/bbl)	Anthracite Coal (short ton)	Bituminous Coal (short ton)	Natural Gas-Dry (1000 cu ft)	Distillate Fuel Oil (42 gal/bbl)	Residual Fuel Oil (42 gal/bbl)	Liquefied Pet. Gas (42 gal/bbl)
Crude Petroleum	42 Gal.Bbl.equals	-	0.228	0.221	5.604	0.996	0.923	1.446
Anthracite Coal	Short Ton equals	4.379	-	0.969	24.541	4.361	4.040	6.333
Bituminous Coal and Lignite	Short Ton equals	4.517	1.031	-	25.314	4.498	4.167	6.532
Natural Gas-Dry	1000 Cu.Ft.equals	0.178	0.041	0.040	-	0.178	0.165	0.258
Distillate Fuel Oil	42 Gal.Bbl.equals	1.004	0.229	0.222	5.628	-	0.927	1.452
Residual Fuel Oil	42 Gal.Bbl.equals	1.084	0.248	0.240	6.074	1.079	-	1.567
Liquefied Petroleum Gas	42 Gal.Bbl.equals	0.692	0.158	0.153	3.875	0.689	0.638	-
(1) B.T.U. Heat Values as used by Bureau of Mines	1000s	5,800	25,400	26,200	1,035	5,825	6,287	4,011

Other Refined Products' B.T.U. Values (1000s): Gasoline 5,248; Kerosine 5,670; Lubricants 6,064.8; Wax 5,537.3; Asphalt 6,636; Miscellaneous 5,796; Natural Gasoline 4,620 per 42 gallon barrel.

GALLON, BARREL, POUND AND TON EQUIVALENTS FOR CONVERTING MEASURES OF CRUDE PETROLEUM AND REFINED PETROLEUM PRODUCTS

	Gravity at 60 F.(2)	Gallons Per Pound	Pounds Per Gallon	Pounds Per 42 Gal Barrel	Short Ton 2,000 Pounds	Barrels Per Metric Ton 2,204.6 Pounds	Barrels Per Long Ton 2,240 Pounds
Crude Petroleum (Foreign)	25.6	.13333	7.500	315	6.349	6.998	7.111
Crude Petroleum (Domestic)	36.0	.14217	7.034	295	6.770	7.463	7.582
Gasoline and Naphtha	59.5	.16215	6.167	259	7.721	8.511	8.648
Kerosine	43.0	.14812	6.751	284	7.053	7.775	7.900
Distillate Fuel Oil	31.3	.13817	7.237	304	6.580	7.253	7.369
Residual Fuel Oil	18.0	.12687	7.882	331	6.041	6.660	6.766
Lubricating Oil	25.6	.13333	7.500	315	6.349	6.998	7.111
Lubricating Grease	33.4	.13996	7.145	300	6.665	7.346	7.464
Wax (Refined and Unrefined)	45.0	.14982	6.675	280	7.134	7.864	7.990
Asphalt	5.6	.11634	8.596	361	5.540	6.106	6.205
Coke	-	.10479	9.543	401	4.990	5.500	5.589
Road Oil	14.5	.12390	8.071	339	5.900	6.503	6.608
Petroleum Jelly and Petrolatum	33.4	.13996	7.145	300	6.665	7.346	7.464
Liquefied Petroleum Gas	-	.22104	4.524	190	10.526	11.603	11.789
Gilsonite	5.0	.11583	8.634	363	5.515	6.080	6.177

(2) For each product the gravity listed is assumed to be representative of the average

Still Gas 3,600 Cu.Ft. = One 42 Gallon Barrel
U.S. Gallon = .833 Imperial Gallon
Imperial Gallon = 1.2 U.S. Gallons

Source: API-ASTM-IP Petroleum Measurement Tables

HEAT VALUES FOR VARIOUS ENERGY PRODUCTS

Energy Products	Units	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Coal											
Production	Million Btu/sh. ton	23.376	23.072	22.897	22.855	22.597	22.248	22.454	22.415	22.309	22.240
Consumption	Million Btu/sh. ton	23.057	22.677	22.506	22.498	22.265	22.017	22.100	21.947	21.714	21.675
Coal Coke	Million Btu/sh. ton	24,800	24.800	24.800	24,800	24.800	24.800	24.800	24.800	24.800	24.800
Crude Oil(1)	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Petroleum Products											
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494	5.479	5.448	5.415
Residential & Commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471	5.468	5.409	5.392
Industrial	Million Btu/barrel	5.565	5.537	5.527	5.535	5.552	5.546	5.416	5.376	5.310	5.262
Transportation	Million Btu/barrel	5.397	5.394	5.392	5.396	5.402	5.407	5.430	5.440	5.434	5.423
Electric Utilities	Million Btu/barrel	6.245	6.238	6.250	6.251	6.249	6.251	6.258	6.254	6.258	6.258
LPG average	Million Btu/barrel	3.746	3.730	3.715	3.711	3.677	3.669	3.680	3.674	3.643	3.615
Natural Gas Plant Liquids	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925	3.955	3.914	3.930	3.872
Natural Gas											
Production, dry	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028
Production, wet	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092	1,098	1,103	1,107
Consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028
Fossil Fuel Steam-Electric Power Plant Generation(2)	Btu/kilowatthour	10,389	10,442	10,406	10,373	10,435	10,361	10,353	10,388	10,453	10,423
Nuclear Power Plant Gen.	Btu/kilowatthour	10,903	11,161	11,013	11,047	10,769	10,941	10,879	10,908	11,030	11,073
Geothermal Power Plant Gen.	Btu/kilowatthour	21,674	21,674	21,611	21,611	21,611	21,611	21,545	21,639	21,639	21,629
Electricity Consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412

(1) Includes lease condensate.
(2) This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

Section XV
Table 4a

HEAT VALUES FOR VARIOUS ENERGY PRODUCTS

Energy Product	Units	1983	1984	1985	1986-87(3)
Coal					
Production	Million Btu/sh. ton	22.056	22.014	21.874	21.918
Consumption	Million Btu/sh. ton	21.581	21.577	21.370	21.467
Coal Coke	Million Btu/sh. ton	24.800	24.800	24.800	24.800
Crude Oil(1)	Million Btu/barrel	5.800	5.800	5.800	5.800
Petroleum Products					
Consumption	Million Btu/barrel	5.406	5.395	5.387	5.415
Residential & Commercial	Million Btu/barrel	5.286	5.261	5.203	5.245
Industrial	Million Btu/barrel	5.273	5.256	5.265	5.318
Transportation	Million Btu/barrel	5.416	5.423	5.421	5.424
Electric Utilities	Million Btu/barrel	6.255	6.251	6.247	6.257
LPG average	Million Btu/barrel	3.614	3.599	3.603	3.640
Natural Gas Plant Liquids	Million Btu/barrel	3.839	3.812	3.815	3.797
Natural Gas					
Production, dry	Btu/cubic foot	1,031	1,031	1,032	1,030
Production, wet	Btu/cubic foot	1,115	1,109	1,112	1,110
Consumption	Btu/cubic foot	1,031	1,031	1,032	1,030
Fossil Fuel Steam-Electric Power Plant Generation	Btu/kilowatthour	10,445	10,211	10,339	10,320
Nuclear Power Plant Gen.	Btu/kilowatthour	10,905	10,843	10,809	10,807
Geothermal Power Plant Gen.	Btu/kilowatthour	21,290	21,303	21,263	21,263
Electricity Consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412

(1) Includes lease condensate.
(2) This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.
(3) Preliminary data.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

U.S. PETROLEUM INDUSTRY INJURY FREQUENCY RATES BY INDUSTRY SECTOR(1)

Industry Sector	1980	1981	1982	1983	1984	1985
Exploration & Production	3.07	2.60	2.58	2.38	2.06	1.81
Gas Processing	3.67	4.33	3.82	3.81	3.77	3.95
Drilling	24.96	23.34	18.91	14.23	14.91	11.13
Petrochemical Mftg.	6.11	5.07	3.54	3.41	2.60	2.50
Refining	5.87	5.21	4.88	4.31	3.52	3.49
Marketing-Wholesale	4.38	4.19	3.39	3.60	3.21	3.80
Marketing-Retail	4.88	4.49	4.25	3.72	4.42	3.96
Pipeline-Liquid	4.21	4.11	3.95	3.95	3.72	3.73
Pipeline-Gas	6.10	4.99	4.83	5.43	4.39	3.58
Marine	3.08	2.00	2.42	2.85	2.70	2.51
Research & Development	2.08	2.19	2.07	2.24	1.72	1.53
Gen. Services, Engineering, and Miscellaneous	1.31	1.35	1.30	1.29	1.08	1.14
Combined Functions	3.76	2.59	4.79	3.50	3.25	N.A.
TOTAL	4.22	3.77	3.48	3.20	2.85	2.77

(1) Covers operations subject to OSHA recordkeeping requirements only. Frequency rates represent total recordable cases per 100 fulltime workers.

Source: American Petroleum Institute, Summary of Occupational Injuries and Illnesses In the Petroleum Industry.

Section XV
Table 6

U.S. ACREAGE UNDER LEASE FOR OIL AND GAS PRODUCTION
(As of January 1)

State	1981		1982		1983	
	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas
Alabama	8,895,085	183,035	9,183,076	183,076	9,297,939	227,040
Alaska	3,527,540	442,540	4,131,340	451,340	5,464,155	459,060
Arizona	12,005,400	5,400	20,146,200	6,200	22,018,200	7,200
Arkansas	9,132,700	1,025,200	10,140,960	1,140,960	12,086,910	1,168,700
California	4,106,000	516,000	5,055,461	455,461	6,018,559	608,646
Colorado	31,809,000	1,103,000	30,639,000	1,209,000	31,577,000	1,334,000
Florida	3,005,200	34,200	3,715,000	35,000	3,755,000	35,000
Illinois	4,413,000	663,000	4,673,000	673,000	4,468,000	668,000
Indiana	8,778,810	7,828,810	8,832,960	7,832,960	8,848,070	7,838,070
Kansas	13,222,400	3,804,000	13,794,900	3,882,000	17,000,000	7,600,000
Kentucky	4,950,000	950,000	5,225,000	975,000	5,500,000	1,000,000
Louisiana	15,962,000	4,595,000	16,100,000	7,000,000	13,550,000	6,990,000
Maryland	449,200	14,200	494,200	14,200	494,200	14,200
Michigan	12,550,000	550,000	14,074,000	574,000	14,324,000	574,000
Mississippi	7,951,400	603,400	11,926,500	626,500	11,944,100	628,500
Missouri	504,430	4,030	612,298	12,298	632,900	12,900
Montana	36,060,000	850,000	38,170,000	940,000	42,023,000	1,003,000
Nebraska	12,584,000	280,000	12,570,000	320,000	14,416,000	331,000
Nevada	17,855,800	3,800	23,554,000	4,000	31,646,600	4,600
New Mexico	30,130,000	3,330,000	30,020,000	3,720,000	31,413,000	3,655,000
New York	5,500,000	1,000,000	5,710,000	1,110,000	5,850,000	1,250,000
North Dakota	22,299,000	473,000	22,920,000	530,000	22,256,000	591,000
Ohio	16,527,377	2,861,927	16,520,326	2,979,826	16,448,304	3,076,994
Oklahoma	16,886,900	3,769,000	17,402,000	4,145,900	17,691,600	4,491,600
Oregon	4,001,120	1,120	4,001,000	1,000	9,001,500	1,500
Pennsylvania	17,010,160	2,625,160	17,137,160	2,731,500	17,540,160	2,851,770
South Dakota	7,457,500	19,500	8,120,000	21,000	7,027,000	33,000
Tennessee	6,522,160	22,160	8,327,257	27,257	8,528,500	28,500
Texas	59,974,600	10,900,000	64,350,000	11,750,000	64,723,000	12,475,000
Utah	29,519,000	345,000	30,900,000	364,000	32,014,000	400,000
Virginia	3,053,150	81,936	3,456,940	90,555	3,158,906	112,838
West Virginia	13,934,000	7,160,000	14,134,000	7,325,000	13,447,000	7,528,000
Wyoming	38,765,000	2,200,000	36,850,000	2,300,000	34,227,000	2,445,000
TOTAL U.S.(1)	479,531,532	58,144,418	522,518,628	73,060,033	538,390,603	69,444,118

(1) Totals may not add due to the addition of miscellaneous acreage for which detailed information is not available.

Source: IPAA--The Oil Producing Industry in Your State, Annuals.

U.S. ACREAGE UNDER LEASE FOR OIL AND GAS PRODUCTION
(As of January 1)

	1984		1985		1986	
State	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas
Alabama	9,416,034	276,428	9,182,000	316,000	8,010,000	371,000
Alaska	10,574,539	521,983	11,240,000	665,000	12,582,000	682,000
Arizona	23,730,680	6,080	23,731,000	6,000	23,747,000	6,000
Arkansas	13,300,000	1,200,000	12,998,000	1,215,000	10,694,000	1,205,000
California	8,565,791	433,791	9,250,000	500,000	5,810,000	428,000
Colorado	35,531,520	1,447,520	35,531,000	1,509,000	35,622,000	1,556,000
Florida	5,130,080	36,280	2,637,000	37,000	2,639,000	37,000
Georgia	1,894,127	0	2,800,000	0	2,291,000	0
Idaho	870,709	0	913,000	0	600,000	0
Illinois	4,629,000	679,000	4,735,000	706,000	5,900,000	880,000
Indiana	8,963,125	7,925,600	8,963,000	7,926,000	8,000,000	6,295,000
Iowa	0	0	5,000,000	0	5,000,000	0
Kansas	18,672,133	8,517,133	19,750,000	10,595,000	16,380,000	8,795,000
Kentucky	5,525,000	1,025,000	6,350,000	1,210,000	5,458,000	1,089,000
Louisiana	13,672,466	6,997,000	14,500,000	7,842,000	14,080,000	7,609,000
Maryland	524,200	14,200	314,000	17,000	316,000	16,000
Michigan	14,576,720	608,720	14,756,000	628,000	14,931,000	653,000
Mississippi	11,478,900	629,140	10,402,000	700,000	9,500,000	710,000
Missouri	712,900	12,900	713,000	13,000	712,000	12,000
Montana	44,050,200	1,054,400	44,050,000	1,085,000	44,111,000	1,105,000
Nebraska	13,411,080	326,080	13,411,000	334,000	13,508,000	340,000
Nevada	29,852,800	4,800	29,853,000	5,000	28,876,000	5,000
New Mexico	42,524,880	3,725,280	42,621,000	3,822,000	42,688,000	3,878,000
New York	5,900,000	2,000,000	5,600,000	2,000,000	5,610,000	2,010,000
North Carolina	200,000	0	457,000	0	500,000	0
North Dakota	23,299,820	617,120	23,300,000	643,000	23,324,000	658,000
Ohio	16,443,251	3,216,051	15,209,000	3,329,000	14,886,000	3,420,000
Oklahoma	18,990,000	4,025,000	19,200,000	7,211,000	20,435,000	7,675,000
Oregon	7,001,600	1,600	5,025,000	25,000	4,460,000	60,000
Pennsylvania	17,672,160	2,940,610	17,997,000	3,047,000	18,042,000	3,200,000
South Dakota	10,877,340	1,032,640	8,120,000	36,000	8,123,000	37,000
Tennessee	9,830,000	50,715	3,827,000	12,000	3,115,000	18,000
Texas	70,300,000	14,938,000	68,374,000	16,500,000	60,670,000	14,640,000
Utah	38,229,686	487,686	38,230,000	504,000	38,258,000	518,000
Virginia	3,376,396	122,700	3,236,000	147,000	2,586,000	316,000
West Virginia	13,757,000	7,693,000	13,408,000	7,807,000	12,673,000	7,807,000
Wyoming	38,999,100	2,598,400	38,999,000	2,659,000	39,064,000	2,697,000
TOTAL U.S.(1)	592,483,237	69,018,667	587,646,000	83,051,000	566,930,000	78,728.000

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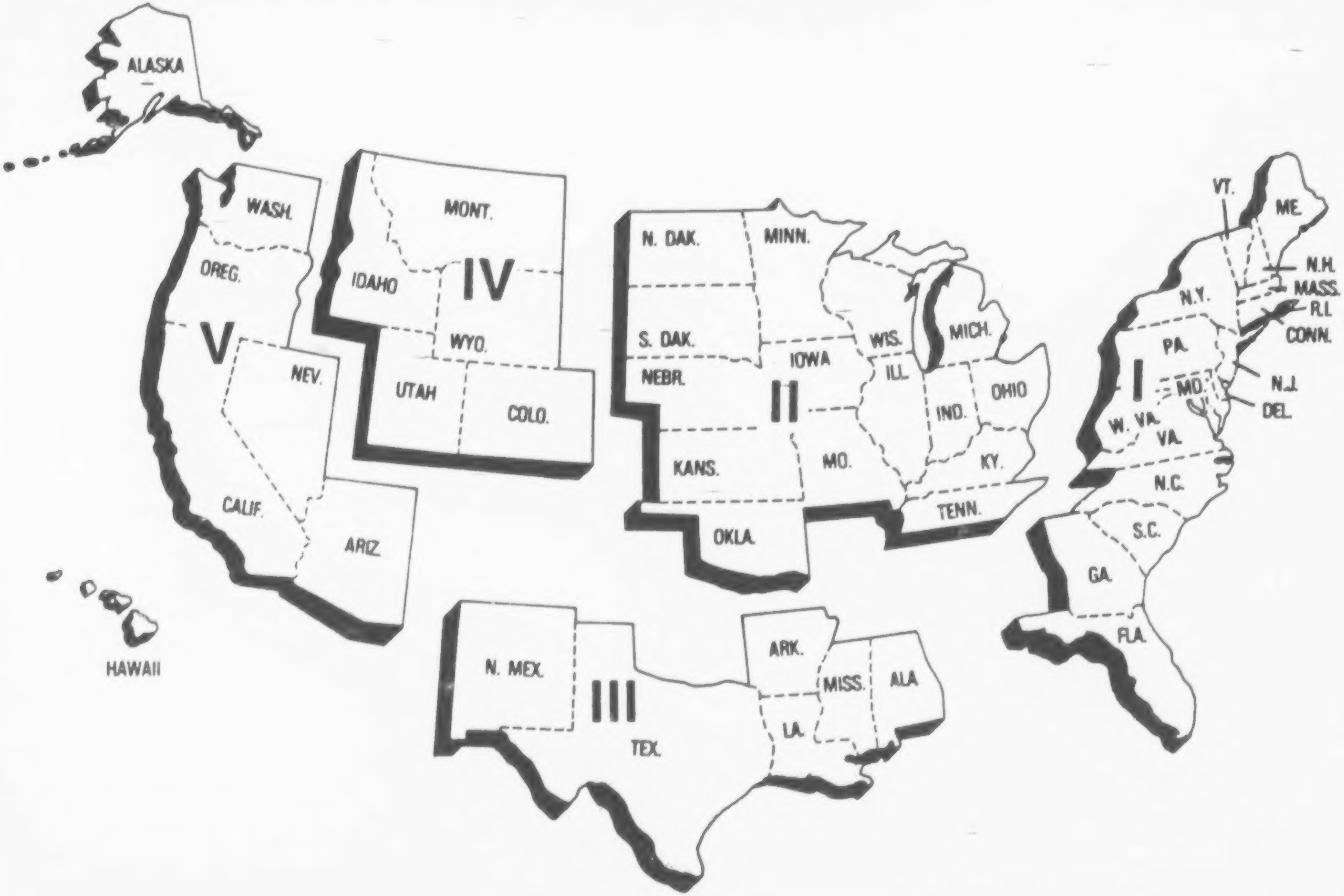
(1) Totals may not add due to the addition of miscellaneous acreage for which detailed information is not available.

Source: IPAA--The Oil Producing Industry in Your State, Annuals.

Petroleum Administration for Defense (PAD) Districts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HEATING EQUIPMENT AND FUELS FOR OCCUPIED HOUSING UNITS

(Thousands)

	1950	1960	1970	1980	1983
Total occupied units	42,826	53,024	63,445	80,390	84,638
Heating Equipment					
Warm air furnace	11,508(1)	17,378(1)	27,515(1)	39,279	44,320
Heat Pumps	(1)	(1)	(1)	2,835	2,171
Steam or Hot Water	10,071	11,990	13,211	13,859	13,772
Floor, Wall or Pipeless furnace	(1)	6,088	5,552	4,693	5,977
Built-in electric units	--	664	3,236	6,370	6,207
Room heaters with flue	15,399(2)	11,183(2)	7,209	6,098	3,438
Room Heaters without flue	5,268	5,218	3,558	2,736	2,926
Fireplaces, Stoves or Heaters (3)	(2)	(2)	2,766	3,977	5,152
None	581	503	398	541	677
House heating fuel					
Utility gas	11,387	22,851	35,014	42,658	46,700
Fuel oil, Kerosene, etc.	9,686	17,158	16,473	14,655	13,031
Electricity	283	933	4,876	14,768	15,684
Bottled, tank or LPgas	787	2,686	3,807	4,535	3,869
Wood or other fuel	4,855	2,460	1,060	2,729	4,245
Coal or Coke	14,828	6,456	1,821	504	432
None	999	478	395	541	677
Cooking Fuel					
Electricity	6,403	16,351	25,768	41,906	NA
Utility gas	22,084	27,296	31,244	32,375	NA
Bottled, tank or LPgas	3,417	6,491	5,314	5,569	NA
Other fuel	10,796	2,603	908	398	NA
None	124	280	213	142	NA

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(1) "Floor, well or pipeless furnace" and "heat pumps" included in "Warm air furnace".
(2) "Fireplace, stoves or portable heaters" included in "Room heaters with flue".
(3) Portable Heaters.

Source: U.S. Bureau of the Census, Census of Housing, 1960 and 1980; Current Housing Reports, Annual Housing Survey 1983.

SELECTED DEFINITIONS

NAPHTHA-TYPE JET FUEL--(Jet B) A fuel in the heavy naphtha boiling range covered by ASTM Spec. D 1655 and meeting military Spec. MIL-T-5624 (JP-4). Used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ramjet and petroleum rocket fuels.

NATURAL GAS--A mixture of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs at reservoir conditions. Natural gas may be subclassified as follows: Associated Gas, Dissolved Gas, and Non-associated Gas.

NATURAL GAS, PRODUCTION--Statistics pertaining to natural gas production represent volumes of gas produced from natural oil and gas reservoirs during given periods of time with adjustments (where applicable) to reflect (1) the volume of gas returned to natural reservoirs, and (2) the reduction of volume resulting from the removal of natural gas liquids and nonhydrocarbon gases. The volume of natural gas withdrawn from underground storage facilities is not included in natural gas production statistics.

NATURAL GAS, PROVED RESERVES--Proved reserves of natural gas as of December 31 of any given year are the estimated quantities of natural gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in the future from known natural oil and gas reservoirs under existing economic and operating conditions.

Reservoirs are considered proved if economic producibility is supported by either actual production or conclusive formation tests. The area of a reservoir considered proved includes: (1) that portion delineated by drilling and defined by gas-oil, gas-water or oil-water contacts; and (2) the adjoining portions not yet drilled but which can be reasonably judged economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurrence of hydrocarbons controls the lower proved limit of the reservoir.

Reserve estimates are prepared for total recoverable natural gas, nonassociated gas, and associated-dissolved gas. Estimates do not include (1) gaseous equivalents of natural gas liquids expected to be recovered from reservoir natural gas as it is produced; (2) natural gas being held in underground storage; or (3) nonhydrocarbon gases.

NATURAL GAS LIQUIDS--Those portions of reservoir gas which are liquefied at the surface in lease separators, field facilities, or gas processing plants. Natural gas liquids include but are not limited to: ethane, propane, butanes, pentanes, natural gasoline, and condensate.

NEW-FIELD WILDCAT--A well located on a structural feature or other type of trap which has not previously produced oil or gas.

OFFSHORE--Term defined as that geographic area which lies seaward of the coastline. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking seaward limit of inland water.

OFFSHORE WELL--A well which is bottomed at, or produces from, a point which lies seaward of the coastline. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking the seaward limit of inland water. If a state agency uses a different basis for classifying onshore and offshore wells, the state classification is used.

OIL WELL--A well completed for the production of crude oil from at least one oil zone or reservoir.

PAD DISTRICTS (Petroleum Administration for Defense Districts)--a geographic aggregation of the 50 states and the District of Columbia into five districts, originally designed by the Petroleum Administration for Defense in 1950 for purposes of administration. These are an outgrowth of the World War II Petroleum Administration for War Districts.

PETROLEUM PRODUCTS--A generic term used to describe products obtained from distilling and processing crude oil, unfinished oils, natural gas liquids, blend stocks and other miscellaneous hydrocarbon compounds.

PETROLEUM REFINERY--A complex installation of equipment designed to manufacture finished petroleum products from crude oil and other liquid hydrocarbons.

PRIMARY STOCKS OF PETROLEUM--Represents stocks held at refineries, natural gas processing plants, bulk terminals, pipelines and leases. Primary stocks exclude those held in secondary and tertiary (consumer) storage.

PROCESSING GAIN--The volumetric amount by which total refinery output is greater than input. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed. Therefore, in terms of volume (barrels), the total output of products is greater than input.

PROCESSING LOSS--The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed and thus an output, in barrels, smaller than the input.

PRODUCT SUPPLIED FOR DOMESTIC USE--Approximately represents consumption of petroleum products in that it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending operations, pipelines, and bulk terminals. It includes losses and fuels used in the industry.

RESIDUAL FUEL OIL--General classification for fuels obtained as liquid still bottoms from the distillation of crude, used alone or in blends with heavy liquids from other refinery process operations. Includes Grades No. 5 (light and heavy), No. 6 (including heady-grade, so-called Bunker C oil), and Navy Special fuel oil.

SERVICE WELL--A well drilled or completed for the purpose of supporting production in an existing field.

SELECTED DEFINITIONS

BARREL--unit of volumetric measure. One barrel equals 42 U.S. gallons.

CRUDE OIL--technically defined as a mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

CRUDE OIL, PRODUCTION--the volume of liquids statistically defined as crude oil, which is produced from oil reservoirs during given periods of time. The amount of such production for a given period is generally established by measurement of volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

CRUDE OIL, PROVED RESERVES--Proved reserves of crude oil as of December 31 of any given year are the estimated quantities of all liquids statistically defined as crude oil, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Reservoirs are considered proved if economic producibility is supported by either actual production or conclusive formation tests. The area of an oil reservoir considered proved includes: (1) that portion delineated by drilling and defined by gas-oil or oil-water contacts, if any; and (2) the immediately adjoining portions not yet drilled but which can be reasonably judged as economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurence of hydrocarbons controls the lower proved limit of the reservoir.

Reserves of crude oil which can be produced economically through application of improved recovery techniques (such as fluid injection) are included in the "proved" classification.

Estimates of proved crude oil reserves do not include the following: (1) oil that may become available from known reservoirs but is reported separately as "indicated additional reserves"; (2) natural gas liquids (including lease condensate); (3) oil the recovery of which is subject to reasonable doubt because of uncertainty as to geology, reservoir characteristics, or economic factors; (4) oil that may occur in untested prospects; and (5) oil that may be recovered from oil shales, coal, gilsonite, and other such sources.

DEVELOPMENT WELL--In general, a well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

DISTILLATE FUEL OIL--A general classification for one or more distilled petroleum fractions used for domestic heating and industrial burners, or for power generation in compression-ignition engines. These fractions are No. 1 Fuel Oil, No. 2 Fuel Oil, Diesel Fuel and No. 4 Fuel Oil.

DRY HOLE--An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

EXPLORATORY WELL--A well drilled (1) to find and produce oil or gas in an unproved area, (2) to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir; or (3) to extend the limits of a known oil or gas reservoir.

GAS WELL--A well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil.

KEROSINE--A refined petroleum distillate conforming to the requirements of ASTM D 3699. Two classifications are No. 1-K and No.2-K.

KEROSINE-TYPE JET FUEL (Jet A)--A quality kerosine product covered by ASTM Spec. D 1655. Used primarily as fuel for commercial turbojet and turboprop aircraft engines. A relatively low freezing point distillate of the kerosine type.

LIQUEFIED REFINERY GAS (LRG)--Includes liquefied refinery gases that were fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state and represent final products. Excludes still gases used for chemical or rubber manufacture which are reported as petrochemical feedstocks and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported in the following categories for use as petrochemical feedstock, for other uses or both: ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane.

LUBRICATING OILS--Includes all grades of paraffinic and naphthenic lubricating oil stocks, from light distillate spindle oils to residual cylinder stocks. Oils used in grease-making are also classified as lubricating oils.

MOTOR GASOLINE--A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, obtained by blending appropriate refinery streams to form a fuel suitable for use in spark ignition engines. Includes all refinery products within the gasoline range (ASTM Spec. D 439) that are to be marketed as motor gasoline without further processing, i.e., any refinery operation except mechanical blending. Includes both leaded and unleaded grades. Also includes finished components in the gasoline range which will be used for blending or compounding into finished gasoline.

SELECTED DEFINITIONS

STRATEGIC PETROLEUM RESERVE (SPR)--Petroleum inventories (currently only crude oil) held in Government-owned underground storage for use during periods of supply interruptions.

STRATIGRAPHIC TEST--A drilling effort, geologically directed, to obtain information pertaining to a specific geological condition that might lead toward the discovery of an accumulation of hydrocarbons. Such wells are customarily drilled without the intention of being completed for hydrocarbon production. This classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration.

UNFINISHED OILS--Includes all oils requiring further processing, i.e., any refinery operation except mechanical blending.

WELL--A hole drilled in the earth for the purpose of (1) finding or producing crude oil or natural gas; or (2) providing services related to the production of crude oil or natural gas.

CURRENT SOURCE LISTINGS FOR BASIC PETROLEUM DATA BOOK

Section I
U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

U.S. Department of Commerce, Bureau of the Census, Current Population Reports (202)763-5002.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section II
U.S. Department of Energy, Energy Information Administration, Crude Oil, Natural Gas and Natural Gas Liquids Reserves (202)586-6090.

Oil and Gas Journal, "Worldwide Report" issue (918)835-3161.

U.S. Department of Interior, U.S. Geological Survey, Circular 860 (703)860-7549.

Section III
American Petroleum Institute, Quarterly Completion Reports (202)682-8518

Society of Exploration Geophysicists, Geophysical Activity Annual Report (918)493-3516.

American Association of Petroleum Geologists, North American Drilling Activity (918)584-2555.

American Petroleum Institute, Joint Associationn Survey (202)682-8491.

Oil and Gas Journal (918)835-3161.

Hughes Tool Company (713)924-2413.

Reed Tool Company, Annual Rotary Rig Census (713)924-5200.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

World Oil Magazine (713)529-4301.

Interstate Oil Compact Commission and National Stripper Well Association (405)525-3556.

Section IV
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

National Stripper Well Association and Interstate Oil Compact Commission (405)525-3556.

Section V
U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings" (202)523-1821.

The Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies" (212)552-2222.

The Chase Manhattan Bank, "Capital Investments of the World Petroleum Industry" (212)552-2222.

American Petroleum Institute, Survey of Oil and Gas Expenditures (202)682-8491.

American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry (202)682-8470.

American Petroleum Institute, Financial Trends of Leading U.S. Oil Companies (202)682-8551.

U.S. Department of Treasury, Internal Revenue Service, SOI Bulletin (202)376-0102.

U.S. Department of Commerce, Bureau of the Census, FT 135 and FT 410 (202)763-5140.

Section VI
U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

U.S. Department of Labor, Bureau of Labor Statistics, Producer Price Indexes (202)272-5123.

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Prices: Energy and Food (202)272-5177.

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index (unadjusted) (202)272-5160.

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annual (202)586-6077.

U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly (202)586-5214.

Petroleum Intelligence Weekly (212)575-1242.

Section VII
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section VII (continued)

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthlies (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly (202)586-5214.

U.S. Department of Transportation, Federal Highway Administration, "Monthly Motor Fuel Reported by States" (202)426-0170.

Section VIII

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Oil and Gas Journal, "Worldwide Report" issue (918)835-3161.

British Petroleum, BP Statistical Review of World Energy. (212)887-9300.

U.S. Department of Energy, Energy Information Administration, International Energy Annual (202)586-9412.

Section IX

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section X

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (202) 887-9300.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

Section XI

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

U.S. Department of Interior, U.S. Geological Survey, Minerals Management Service (202)343-3421.

Offshore Magazine (713)621-9720.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

Section XII

American Gas Association, Gas Facts (703)841-8400.

Association of Oil Pipelines (202)331-8228.

U.S. Department of Transportation, Coast Guard, "Polluting Incidents In and Around U.S. Waters" (202)267-2229.

U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics" (202)426-0160.

Automotive News, "Market Data Book" issues (313)446-6000.

Section XIII

U.S. Department of Energy, Energy Information Administration, Crude Oil, Natural Gas and Natural Gas Liquids Reserves (202)586-6090.

Oil and Gas Journal "Worldwide Report" issues (918)835-3161.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

U.S. Department of Energy, Energy Information Administration, Natural Gas Monthly (202)586-6077.

Section XIV

Oil and Gas Journal, "Worldwide Report" issues (918)835-3161.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Organization of Petroleum Exporting Countries, OPEC Annual Statistical Bulletin, Obere Donaustrasse 93, A-1020 Vienna, Austria.

Section XV

Independent Petroleum Association of America, The Oil Producing Industry in Your State (202)857-4722.

National Petroleum News, Factbook issue (201)682-2902.

ASTM-IP Petroleum Measurement Tables, API (202)682-8145.

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

American Petroleum Institute, Summary of Occupational Injuries and Illnesses in the Petroleum Industry (202)682-8506.

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BASIC PETROLEUM DATA BOOK

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The American Petroleum Institute, incorporated in 1919 under the laws of the District of Columbia, serves as a forum, information bureau, technical clearing house, and national trade association for the petroleum industry.

The Basic Petroleum Data Book is updated three times a year. Each issue is an independent, newly-printed book which can be discarded when subsequent volumes are released. The first Data Book was printed in October 1975.

A MESSAGE FOR THE DATA BOOK USER

This is a secondary source publication. The American Petroleum Institute has undertaken the task of compiling these data in this publication as a service to interested users. Except for those tables where API is the primary source, no endorsement of data accuracy or completeness is intended or implied by the data's inclusion in this publication.

Preliminary data are included in this compendium in order to provide the most timely information possible. These data are identified as preliminary. Annual revised figures are published as they become available. If any of these data are revised again in subsequent years, they are not included in this report unless they represent a major revision of the series.

For some data series, there are several agencies publishing similar information. Consequently, the data may not match perfectly. The analyst is cautioned that it is his responsibility to determine which series best meets his requirements.

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(Quadrillion BTU)

SUPPLY/DISPOSITION	1986	1987	1988	1989	1990	1995	2000
Production							
Crude Oil and Lease Condensate	18.4	17.7	17.3	16.9	16.2	13.1	12.5
NGPL's	2.1	2.2	2.2	2.2	2.3	2.5	2.6
Natural Gas(1)	16.5	17.0	17.2	17.2	17.5	18.1	19.0
Coal	19.5	20.2	20.7	20.8	21.4	23.6	25.5
Nuclear	4.5	4.9	5.6	5.6	5.8	6.1	6.2
Hydropower/Other(2)	3.3	2.8	2.6	3.1	3.3	3.4	3.4
Total Production	64.3	64.9	65.7	65.9	66.4	66.6	69.3
Imports							
Crude Oil(3)	9.0	10.1	11.0	11.9	13.3	16.6	18.3
Petroleum Prod.	4.4	4.3	4.2	4.5	4.6	5.2	5.5
Natural Gas(4)	0.7	0.9	1.1	1.3	1.4	1.9	2.3
Other Imports(5)	0.4	0.5	0.5	0.5	0.5	0.7	0.9
Total Imports	14.5	15.8	16.9	18.3	19.9	24.4	27.0
Exports							
Coal	2.2	2.1	2.3	2.2	2.2	2.5	2.9
Petroleum	1.7	1.6	1.7	1.7	1.7	1.7	1.7
Total Exports	3.9	3.7	4.0	3.8	4.0	4.2	4.7
Adjustments(6)	-0.6	0.2	0.8	0.3	-0.7	-1.0	-1.0
Consumption							
Petroleum Products(7)	32.2	32.9	33.7	33.9	34.4	35.2	36.8
Natural Gas	16.7	17.6	18.3	18.5	18.5	19.5	20.9
Coal	17.3	18.0	18.8	19.0	19.1	21.0	22.5
Nuclear	4.5	4.9	5.6	5.6	5.8	6.1	6.2
Hydroelectric/Other(8)	3.6	3.3	3.1	3.6	3.8	4.0	4.2
Total Consumption	74.3	76.8	79.4	80.6	81.6	85.8	90.6
Prices (1988 $ per unit)							
World Oil Price ($/bbl)(9)	14.92	18.70	14.70	14.40	15.00	20.60	28.00
Avg Wellhead Price ($/Mcf)	2.06	1.72	1.62	1.64	1.75	2.80	3.91
Avg Coal Minemouth Price ($/ton)	25.36	23.79	23.61	23.49	24.00	24.95	25.87

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(1) Dry natural gas.
(2) Includes hydropower, geothermal power, and wood waste.
(3) Includes imports of crude oil for the Strategic Petroleum Reserve.
(4) Represents net imports.
(5) Includes electricity, coal and coal coke imports.
(6) Balancing item that includes stock changes, gains, losses, and unaccounted for supply.
(7) Includes natural gas plant liquids and crude oil consumed as a fuel.
(8) Includes industrial generation of hydroelectric power, net electricity imports, and electricity produced from geothermal, wood, waste, wind, photovoltaic, solar thermal sources connected to electric utility distribution systems. Also includes net coal coke imports.
(9) Represents the cost of imported crude oil to U.S. refiners

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1989.

Section I
Table 2

U.S. CONSUMPTION OF ENERGY BY SOURCE AND END-USE SECTOR
(Quadrillion BTU)

SECTOR AND FUEL	1986	1987	1988	1989	1990	1995	2000
Residential	8.80	8.96	9.41	9.53	9.52	9.60	9.59
Distillate and LPG(1)	1.51	1.54	1.61	1.63	1.59	1.46	1.35
Natural Gas	4.43	4.55	4.73	4.80	4.76	4.63	4.44
Other residential(2)	0.07	0.06	0.07	0.07	0.06	0.06	0.05
Electricity	2.79	2.90	3.01	3.03	3.10	3.45	3.74
Commercial	6.01	6.22	6.55	6.74	6.85	7.23	7.66
Petroleum	1.00	0.98	1.00	1.02	1.06	1.04	1.02
Natural Gas	2.38	2.48	2.69	2.73	2.73	2.77	2.77
Other Commerical(3)	0.17	0.18	0.18	0.18	0.18	0.17	0.17
Electricity	2.46	2.58	2.69	2.80	2.88	3.30	3.69
Industrial	20.06	21.19	21.66	21.75	22.01	22.78	23.87
Petroleum and LPG	4.75	4.77	4.75	4.84	4.91	5.21	5.61
Natural Gas	6.72	7.25	7.38	7.49	7.52	7.57	7.46
Coal	2.63	2.68	2.77	2.73	2.72	2.72	1.84
Other Industrial(4)	3.18	3.57	3.72	3.57	3.65	3.54	3.58
Hydropower	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Purchased Electricity	2.76	2.88	3.00	3.09	3.17	3.72	4.40
Transportation	20.75	21.24	21.82	22.23	22.38	22.50	23.20
Petroleum	19.97	20.43	20.94	21.37	21.56	21.62	22.25
Natural Gas	0.50	0.53	0.57	0.56	0.51	0.54	0.57
Other transportation(5)	0.27	0.28	0.30	0.30	0.31	0.34	0.37
Electric Utilities	26.67	27.57	28.72	29.30	30.00	34.10	38.10
Petroleum	1.45	1.26	1.32	1.16	1.32	1.96	2.54
Natural Gas	2.69	2.92	2.92	2.92	2.96	4.01	5.66
Coal	14.45	15.19	15.84	16.06	16.23	18.11	19.55
Nuclear	4.47	4.92	5.64	5.63	5.78	6.08	6.22
Hydropower/other(6)	3.60	3.29	3.00	3.53	3.71	3.94	4.13

(1) Includes kerosene.
(2) Includes coal.
(3) Includes kerosene, and liquefied petroleum gas.
(4) Includes still gas, net coke imports, asphalt, special naphthas, lubricants, waxes, and petroleum coke.
(5) Includes liquefied petroleum gas, lubricants and waxes, and electricity.
(6) Includes renewable facilities such as hydropower, geothermal power, wood, waste, solar power and wind power. Also includes net electricity imports and minor petroleum products.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1989.

SELECTED UNITED STATES ECONOMIC, DEMOGRAPHIC, AND ENERGY INDICATORS

Year	Gross National Product (Billion $ 1972)	Population (Millions)	Gross Energy Input(1) (Quadrillion Btu)	Gross Energy Per Dollar of 1972 GNP (Thousand Btu)	Gross Energy per capita (Million Btu)
1947	470.3	144.1	33.0	70.2	229.0
1948	489.8	146.6	33.9	69.2	231.2
1949	492.2	149.2	31.5	64.0	211.1
1950	534.8	152.3	34.0	63.6	223.2
1951	579.4	154.9	36.8	63.5	237.6
1952	600.8	157.6	36.5	60.8	231.7
1953	623.6	160.2	37.6	60.3	234.7
1954	616.1	163.0	36.3	58.9	222.7
1955	667.5	165.9	39.7	60.4	239.3
1956	671.6	168.9	41.7	62.1	246.9
1957	683.8	172.0	41.7	61.0	242.2
1958	680.9	174.9	41.7	61.2	238.4
1959	721.7	177.8	43.1	59.7	242.4
1960	737.1	180.7	44.6	60.5	246.8
1961	756.6	183.8	45.3	59.9	246.5
1962	800.3	186.5	47.4	59.2	254.1
1963	832.5	189.2	49.3	59.2	260.5
1964	876.4	191.8	51.2	58.4	266.9
1965	929.3	194.3	53.3	57.4	274.3
1966	984.8	196.6	56.4	57.3	286.9
1967	1,011.4	198.7	58.3	57.6	293.4
1968	1,058,1	200.7	61.7	58.3	307.4
1969	1,087.6	202.7	65.0	59.8	320.7
1970	1,085.6	205.1	67.1	61.8	327.2
1971	1,122.4	207.7	68.3	60.9	328.8
1972	1,185.9	209.9	71.6	60.4	341.1
1973	1,254.0	212.0	74.6	59.5	351.9
1974	1,246.0	213.9	72.7	58.3	339.9
1975	1,232.0	216.0	70.5	57.2	326.4
1976	1,298.0	218.4	74.3	57.2	340.2
1977	1,370.0	220.2	76.2	55.6	346.1
1978	1,439.0	222.6	78.0	54.2	350.4
1979	1,479.0	225.6	78.8	53.3	349.3
1980	1,475.0	227.7	75.9	51.5	333.3
1981	1,514.0	229.3	73.9	48.8	322.3
1982	1,485.0	231.5	70.8	47.7	305.8
1983	1,535.0	234.0	70.5	45.9	301.3
1984	1,639.0	236.2	74.0	45.2	313.3

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(1) Gross energy is the total of inputs into the economy of the primary fuels (petroleum, natural gas, and coal), including imports of their derivatives plus the generation of hydro and nuclear power converted to equivalent energy inputs.

Source: U.S. Bureau of Mines, Press Release, March 14, 1977
U.S. Department of Commerce: U.S. Bureau of Census, Current Population Reports
U.S. Energy Information Administration, Monthly Energy Review

SELECTED UNITED STATES ECONOMIC, DEMOGRAPHIC, AND ENERGY INDICATORS

Year	Gross National Product (Billion 1982 $)	Population (Millions)	Gross Energy Input(1) (Quadrillion Btu)	Gross Energy Per Dollar of 1982 GNP (Thousand Btu)	Gross Energy Per Capita (Million Btu)
1985	3,619.0	238.7	73.9	20.4	309.6
1986	3,722.0	241.1	74.2	19.9	307.8
1987	3,847.0	246.3	76.8	20.0	311.8
1988	3,996.0	247.4	79.9	20.0	323.0

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(1) Gross energy is the total of inputs into the economy of the primary fuels (petroleum, natural gas, and coal), including imports of their derivatives plus the generation of hydro and nuclear power converted to equivalent energy inputs.

Source: U.S. Department of Commerce, U.S. Bureau of the Census--Current Population Reports
U.S. Department of Energy, Energy Information Administration--Monthly Energy Review

U.S. PETROLEUM SUPPLY/DISPOSITION BALANCE
(Millions of Barrels Per Day)

SUPPLY/DISPOSITION	1986	1987	1988	1989	1990	1995	2000
World Oil Price(1) (1988$/bbl.)	14.92	18.70	14.70	14.40	15.00	20.60	28.00
Production	10.90	10.65	10.51	10.31	10.03	8.63	8.45
Crude and Condensate	8.68	8.35	8.18	7.97	7.64	6.17	5.89
Alaska	1.87	1.96	2.03	2.01	1.96	1.29	0.91
Lower 48	6.81	6.39	6.15	5.95	5.68	4.88	4.98
Natural Gas Plant Liquids	1.55	1.60	1.61	1.62	1.67	1.77	1.87
Other domestic	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Processing gain(2)	0.62	0.64	0.66	0.66	0.66	0.62	0.63
Imports (incl. SPR)	6.22	6.67	7.08	7.63	8.31	10.11	11.03
Crude	4.18	4.67	5.12	5.54	6.16	7.71	8.49
Refined products	2.05	2.00	1.96	2.09	2.16	2.40	2.54
Exports	0.78	0.76	0.80	0.79	0.83	0.83	0.83
Crude	0.15	0.15	0.17	0.17	0.19	0.19	0.19
Refined Products	0.63	0.61	0.64	0.62	0.63	0.63	0.63
Net Imports(incl SPR)	5.44	5.91	6.28	6.84	7.49	9.28	10.20
Primary Stock Changes							
Net withdrawals	-0.15	0.04	0.04	0.01	-0.04	-0.01	-0.03
SPR additions(-)	-0.05	-0.08	-0.05	-0.05	-0.08	-0.08	0.00
Total Primary Supply	16.14	16.52	16.78	17.11	17.40	17.83	18.61
Refined Petroleum Products	16.29	16.67	17.01	17.20	17.44	17.82	18.61
Motor Gasoline	7.03	7.21	7.34	7.44	7.46	7.20	7.26
Jet fuel(3)	1.31	1.37	1.44	1.49	1.52	1.61	1.70
Distillate Fuel Oil(4)	3.01	3.07	3.22	3.32	3.33	3.51	3.69
Residual Fuel Oil	1.42	1.26	1.25	1.20	1.30	1.51	1.70
Other Products(5)	3.52	3.76	3.76	3.75	3.83	3.99	4.26

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(1) The cost of imported crude oil to U.S. refiners.
(2) Represents volumetric gain in refinery distillation and cracking processes.
(3) Includes naphtha and kerosene type.
(4) Includes kerosene.
(5) Includes aviation gasoline, liquefied petroleum gas, petrochemical feedstocks, miscellaneous petroleum products, lubricants, waxes, plant condensate, natural gasoline, asphalt, road oil, still gas, special naphthas, petroleum coke, and unfinished oils.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1989.

U.S. PRICE OF ENERGY BY SOURCE AND END-USE SECTOR
(1988 Dollars per Million BTU)

SECTOR AND FUEL	1986	1987	1988	1989	1990	1995	2000
Residential	11.57	11.17	10.83	10.60	11.08	12.12	13.60
Primary Energy	6.27	5.80	5.47	5.40	5.62	6.67	7.95
Petroleum Products	7.10	6.59	5.96	5.73	6.24	7.85	9.68
Natural Gas	6.03	5.57	5.34	5.32	5.45	6.35	7.48
Steam Coal	3.07	2.81	2.73	2.74	2.77	2.90	3.06
Electricity	23.01	22.40	22.21	21.75	22.39	21.84	22.43
Commercial	11.96	11.47	11.28	11.46	11.54	12.39	13.76
Primary Energy	4.91	4.66	4.53	4.47	4.53	5.54	6.79
Petroleum Products	4.42	4.64	4.61	4.42	4.38	5.82	7.54
Natural Gas	5.27	4.79	4.61	4.59	4.70	5.56	6.67
Steam Coal	1.76	1.60	1.56	1.56	1.58	1.66	1.75
Electricity	22.15	21.06	20.98	21.27	21.18	20.65	21.24
Industrial	5.02	4.79	4.55	4.62	4.63	5.61	6.82
Primary Energy	3.40	3.31	3.01	2.99	2.99	4.01	5.12
Petroleum Products	4.02	4.22	3.62	3.56	3.46	4.91	6.34
Natural Gas	3.25	2.84	2.79	2.81	2.91	3.76	4.85
Metallurgical Coal	2.02	1.80	1.76	1.76	1.78	1.85	1.94
Steam Coal	1.74	1.57	1.54	1.54	1.56	1.62	1.69
Hydroelectric Power	12.31	12.31	12.31	12.31	12.31	12.31	12.31
Electricity	15.19	14.16	14.11	14.42	14.33	13.79	14.35
Transportation	6.66	6.85	6.42	6.11	6.40	7.98	9.61
Primary Energy	6.65	6.84	6.41	6.10	6.39	7.97	9.60
Petroleum Products	6.65	6.84	6.41	6.10	6.39	7.97	9.60
Electricity	20.83	20.09	19.86	20.06	20.13	19.62	20.26
Electric Utilities							
Fossil Fuel Average	1.87	1.78	1.66	1.63	1.72	2.03	2.47
Petroleum Products	2.63	3.15	2.51	2.47	2.62	3.70	4.84
Natural Gas	2.44	2.32	2.18	2.21	2.25	3.10	4.16
Steam Coal	1.69	1.56	1.50	1.46	1.54	1.61	1.68
Nuclear	0.80	0.80	0.78	0.76	0.73	0.62	0.57
Average Price to All Users							
Petroleum Products	5.77	5.95	5.48	5.27	5.44	6.90	8.40
Natural Gas	4.17	3.75	3.65	3.66	3,74	4.51	5.48
Coal	1.72	1.58	1.52	1.49	1.56	1.63	1.69
Electricity	20.05	19.15	19.04	19.07	19.22	18.61	19.06

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 1989.

UNITED STATES TOTAL GROSS CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES(1)
(Trillion Btu)

Year	Coal(2)	Petroleum(3)	Natural Gas Dry	Hydro-power(4)	Nuclear Power(4)	Total Consumption
1947	15,824	11,367	4,518	1,326	-	33,035
1948	14,897	12,557	5,033	1,393	-	33,880
1949	12,631	12,119	5,289	1,449	-	31,488
1950	12,913	13,489	6,150	1,440	-	33,992
1951	13,225	14,848	7,248	1,454	-	36,775
1952	11,868	15,334	7,760	1,496	-	36,458
1953	11,893	16,098	8,156	1,439	-	37,586
1954	10,195	16,132	8,548	1,388	-	36,263
1955	11,540	17,524	9,232	1,407	-	39,703
1956	11,752	18,627	9,834	1,487	-	41,700
1957	11,168	18,570	10,416	1,551	1	41,706
1958	9,849	19,214	10,995	1,636	2	41,696
1959	9,810	19,747	11,990	1,591	2	43,140
1960	10,140	20,067	12,699	1,657	6	44,569
1961	9,906	20,487	13,228	1,680	18	45,319
1962	10,189	21,267	14,121	1,821	24	47,422
1963	10,714	21,950	14,843	1,767	34	49,308
1964	11,264	22,386	15,648	1,907	35	51,240
1965	11,908	23,242	16,097	2,058	38	53,343
1966	12,495	24,395	17,392	2,073	57	56,412
1967	12,256	25,335	18,250	2,344	80	58,265
1968	12,659	27,052	19,580	2,342	130	61,763
1969	12,733	28,421	21,020	2,659	146	64,979

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives) and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, processing, and transportation of energy power.

(2) Includes anthracite, bituminous, lignite coal, and imported coke.

(3) Petroleum products including still gas, liquefied refinery gas, and natural gas liquids.

(4) Output of hydropower (adjusted for net imports or net exports) and nuclear power converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree and J.A. West: "United States Energy Through The Year 2000," December 1972

UNITED STATES TOTAL GROSS CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES(1)
(Trillion Btu)

Year	Coal(2)	Petroleum(3)	Natural Gas Dry	Hydro-power(4)	Nuclear Power(4)	Total Consumption
1970	12,698	29,537	22,029	2,650	229	67,143
1971	12,043	30,570	22,469	2,862	404	68,348
1972	12,461	32,966	22,699	2,929	577	71,643
1973	12,971	34,840	22,512	3,010	910	74,282
1974	12,663	33,455	21,732	3,309	1,272	72,543
1975	12,663	32,731	19,948	3,219	1,900	70,546
1976	13,584	35,175	20,345	3,065	2,111	74,362
1977	13,922	37,122	19,931	2,515	2,702	76,288
1978	13,765	37,965	20,000	3,142	3,024	78,089
1979	15,039	37,123	20,666	3,141	2,776	78,898
1980	15,423	34,202	20,394	3,118	2,739	75,955
1981	15,907	31,931	19,928	3,105	3,008	73,990
1982	15,322	30,231	18,505	3,572	3,131	70,848
1983	15,894	30,054	17,357	3,899	3,203	70,524
1984	17,070	31,051	18,507	3,757	3,553	74,101
1985	17,478	30,922	17,834	3,363	4,149	73,945
1986	17,262	32,196	16,708	3,385	4,471	74,237
1987	18,008	32,865	17,668	3,068	4,906	76,768
1988	18,825	33,959	18,595	2,615	5,678	79,948

(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives) and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, processing, and transportation of energy power.

(2) Includes anthracite, bituminous, lignite coal, and imported coke.

(3) Petroleum products including still gas, liquefied refinery gas, and natural gas liquids.

(4) Output of hydropower (adjusted for net imports or net exports) and nuclear power converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission.

(5) Figures do not total due to omission of geothermal power and electricity produced from wood and waste.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines: Press Release, February 1977
U.S. Department of Energy: 1973-1988: Energy Information Administration, Monthly Energy Review, January 1989

Section I
Table 7

UNITED STATES TOTAL PRODUCTION OF ENERGY RESOURCES BY MAJOR SOURCE
(Trillion Btu)

Year	Coal(1)	Petroleum	Natural Gas	Hydropower	Nuclear Power	Total Domestic Gross Energy Inputs
1947	17,975	10,771	5,012	1,296	--	35,054
1948	17,158	11,717	5,615	1,369	--	35,859
1949	12,557	10,683	5,911	1,425	--	30,576
1950	14,647	11,449	6,841	1,415	--	34,352
1951	15,066	13,037	8,106	1,424	--	37,633
1952	13,262	13,282	8,705	1,466	--	36,715
1953	12,767	13,671	9,116	1,413	--	36,967
1954	11,001	13,427	9,488	1,360	--	35,276
1955	12,745	14,445	10,532	1,360	--	39,082
1956	13,747	15,344	11,252	1,435	--	41,778
1957	13,444	15,346	11,885	1,422	1	42,098
1958	11,201	14,154	12,244	1,592	2	39,193
1959	11,105	14,662(3)	13,361(3)	1,551(3)	2	40,681
1960	11,140	14,664(4)	14,135(4)	1,608(4)	6	41,553
1961	10,751	15,185	14,691	1,656	18	42,301
1962	11,211	15,495	15,365	1,816	24	43,911
1963	12,176	15,741	16,271	1,768	34	45,990
1964	12,854	15,691	17,138	1,886	35	47,604
1965	13,395	15,930	17,652	2,059	38	49,074
1966	13,836	16,925	18,984	2,062	57	51,864
1967	14,215	18,100	20,087	2,347	80	54,829
1968	13,955	18,593	21,548	2,349	130	56,575
1969	14,223	18,886	22,838	2,648	146	58,741
1970	15,067	20,401	24,154	2,630	229	62,481
1971	13,607	20,033	24,805	2,825	404	61,674
1972	14,500	20,041	24,792	2,866	576	62,775
1973	13,993	19,493	24,756	2,861	910	62,059
1974	14,074	18,575	23,681	3,177	1,272	60,836

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(1) Includes anthracite, bituminous and lignite coals.
(3) Includes Alaska.
(4) Denotes first year for which figures include Alaska and Hawaii.

Source: U.S. Department of Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through The Year 2000," December 1972
1970-1972: U.S. Bureau of Mines, Press Release
1973-1974: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

UNITED STATES TOTAL PRODUCTION OF ENERGY RESOURCES BY MAJOR SOURCE
(Trillion Btu)

Year	Coal(1)	Petroleum	Natural Gas(2)	Hydropower	Nuclear Power	Total Domestic Gross Energy Inputs(3)
1975	14,990	17,729	22,014	3,155	1,900	59,860
1976	15,654	17,262	21,807	2,976	2,111	59,892
1977	15,755	17,454	21,892	2,333	2,702	60,219
1978	14,910	18,434	21,730	2,937	3,024	61,103
1979	17,539	18,104	22,362	2,931	2,776	63,801
1980	18,597	18,249	22,162	2,900	2,739	64,761
1981	18,376	18,146	22,006	2,758	3,008	64,421
1982	18,639	18,309	20,446	3,266	3,131	63,898
1983	17,246	18,392	18,714	3,527	3,203	61,215
1984	19,719	18,848	20,205	3,348	3,553	65,847
1985	19,325	18,992	19,147	2,939	4,149	64,765
1986	19,510	18,376	18,620	3,017	4,471	64,225
1987	20,142	17,675	19,264	2,593	4,906	64,823
1988	20,936	17,255	19,420	2,318	5,678	65,843

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(1) Includes anthracite, bituminous and lignite coals.
(2) Includes natural gas plant liquids
(3) Figures do not total due to omission of geothermal power and electricity produced from wood and waste.

Source: U.S. Department of Energy, Energy Information Administration: Monthly Energy Review, January 1989

TOTAL U.S. GROSS CONSUMPTION BY CONSUMING SECTOR(1)
(Trillion Btu)

Year	Household and Commercial	Industrial	Transportation	Electricity Generation	Miscellaneous and Un-Accounted for	Total Consumption(2)
1947	6,775	12,795	8,791	4,264	410	33,035
1948	7,039	12,322	8,781	4,725	1,014	33,880
1949	6,884	11,369	8,075	4,616	544	31,488
1950	7,593	12,325	8,616	4,981	477	33,992
1951	7,857	13,698	9,206	5,281	733	36,775
1952	7,979	13,098	9,168	5,518	695	36,458
1953	7,757	13,752	9,205	5,891	981	37,586
1954	7,968	12,515	9,113	5,940	727	36,263
1955	8,595	13,991	9,826	6,595	696	39,703
1956	8,903	14,588	10,132	7,082	935	41,700
1957	8,685	14,503	10,229	7,330	959	41,706
1958	9,467	13,507	10,275	7,317	1,130	41,696
1959	9,711	14,040	10,387	7,873	1,129	43,140
1960	10,174	14,642	10,816	8,263	672	44,569
1961	10,373	14,631	10,986	8,537	792	45,319
1962	10,948	15,249	11,415	9,093	717	47,422
1963	11,016	15,908	11,962	9,683	739	49,308
1964	11,143	16,698	12,261	10,375	763	51,240
1965	11,830	17,176	12,714	11,075	548	53,343
1966	12,388	18,028	13,345	12,054	597	56,412
1967	13,015	18,230	14,015	12,728	278	58,265
1968	13,109	19,363	15,156	13,892	243	61,763
1969	13,606	20,107	15,784	15,254	228	64,979
1970	13,988	20,225	16,473	16,242	215	67,143
1971	14,549	19,299	17,076	17,222	205	68,348
1972	14,917	19,835	18,081	18,543	233	71,609
1973	12,271	23,593	18,567	19,853	NA	74,282
1974	11,771	22,602	18,082	20,022	NA	72,543

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives), and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, and transportation of energy power.

(2) Data may not add to totals because of independent rounding.

SOURCE: U.S. Department of the Interior: 1947-1969: W.G. Dupree and J.A. West, "United States Energy Through the Year 2000," December 1972.
1970: U.S. Bureau of Mines, Minerals Yearbook 1973
1971-1972: U.S. Bureau of Mines, Press Release, February 1977
1973-1974: Department of Energy, Energy Information Administration, Monthly Energy Review

Section I
Table 8a

TOTAL U.S. GROSS CONSUMPTION BY CONSUMING SECTOR(1)
(Trillion Btu)

Year	Household and Commercial	Industrial	Transportation	Electrical Generation	Miscellaneous and Un-Accounted for	Total Consumption(2)
1975	11,596	20,392	18,209	20,350	NA	70,546
1976	12,250	21,465	19,066	21,574	NA	74,362
1977	11,873	21,912	19,784	22,713	NA	76,288
1978	11,907	21,875	20,580	23,724	NA	78,089
1979	11,525	22,806	20,437	24,128	NA	78,898
1980	10,720	21,072	19,658	24,505	NA	75,955
1981	10,043	19,717	19,469	24,760	NA	73,990
1982	10,064	17,473	19,032	24,270	NA	70,848
1983	9,716	16,751	19,094	24,956	NA	70,524
1984	10,085	18,209	19,827	25,977	NA	74,101
1985	9,826	17,573	20,063	26,484	NA	73,945
1986	9,576	17,290	20,729	26,642	NA	74,237
1987	9,718	18,168	21,336	27,551	NA	76,768
1988	10,418	19,090	21,816	28,628	NA	79,948

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(1) Gross energy is that contained in all types of commercial energy at the time it is incorporated in the economy, whether the energy is produced domestically or imported. Gross energy comprises inputs of primary fuels (or their derivatives), and outputs of hydropower and nuclear power converted to theoretical energy inputs. Gross energy includes the energy used for the production, and transportation of energy power.

(2) Data may not add to totals because of independent rounding and consumption of geothermal power and electricity produced from wood, waste and wind energy.

SOURCE: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review, January 1989

Section I
Table 9

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE INDUSTRIAL SECTOR

Year	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	273,403	7,298	418.3	2,490	2,905,571	3,007	135	459	13,254
1948	244,214	6,516	427.0	2,530	3,164,928	3,276	147	500	12,822
1949	208,919	5,571	415.6	2,466	3,219,197	3,332	142	485	11,854
1950	223,507	5,957	442.4	2,641	3,601,757	3,727	164	559	12,884
1951	238,776	6,403	516.1	3,044	4,107,117	4,251	192	656	14,354
1952	211,146	5,673	515.0	3,034	4,242,986	4,391	200	682	13,780
1953	226,865	6,105	524.7	3,093	4,389,128	4,554	224	765	14,517
1954	179,148	4,860	529.8	3,118	4,383,197	4,537	235	802	13,317
1955	214,946	5,726	566.7	3,330	4,768,562	4,935	295	1,008	14,999
1956	217,810	5,805	626.6	3,688	4,922,139	5,095	326	1,113	15,701
1957	213,404	5,695	595.8	3,478	5,150,413	5,330	332	1,133	15,636
1958	175,600	4,675	570.3	3,292	5,352,294	5,540	323	1,102	14,609
1959	169,924	4,530	625.1	3,589	5,720,756	5,921	356	1,215	15,255
1960	175,225	4,673	643.9	3,682	6,074,114	6,287	383	1,306	15,948
1961	168,090	4,478	642.6	3,682	6,221,668	6,471	383	1,306	15,937
1962	169,995	4,527	678.8	3,880	6,579,008	6,842	411	1,402	16,651
1963	178,201	4,754	702.0	3,994	6,917,738	7,160	429	1,464	17,372
1964	189,561	5,063	744.6	4,184	7,198,706	7,451	453	1,544	18,242
1965	200,688	5,366	740.4	4,139	7,433,200	7,671	479	1,634	18,810
1966	204,945	5,472	781.0	4,353	7,948,486	8,203	524	1,788	19,816
1967	194,595	5,199	798.4	4,432	8,332,614	8,599	547	1,868	20,098
1968	191,602	5,124	897.2	4,965	8,987,095	9,274	599	2,044	21,407
1969	188,586	5,051	943.6	5,171	9,587,670	9,885	632	2,155	22,262

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000," December 1972

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE INDUSTRIAL SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	186,637	5,002	940.4	5,061	9,856,844	10,161	648	2,210	22,434
1971	158,866	4,303	947.9	5,088	9,577,212	9,874	682	2,327	21,592
1972	160,624	4,275	1,058.2	5,643	9,622,659	9,882	741	2,528	22,328
1973	179,625	4,057	1,635.1	9,104	10,184,314	10,388	686	2,341	25,917
1974	172,621	3,870	1,570.6	8,694	9,768,555	10,003	685	2,337	24,994(4)
1975	163,443	3,667	1,473.8	8,147	8,364,706	8,532	688	2,346	22,738(4)
1976	162,494	3,661	1,626.9	9,010	8,597,645	8,761	754	2,573	24,038
1977	154,690	3,454	1,759.5	9,774	8,474,975	8,636	786	2,682	24,594(4)
1978	149,232	3,314	1,776.9	9,867	8,404,528	8,539	809	2,761	24,636(4)
1979	160,030	3,593	1,950.5	10,568	8,397,839	8,549	842	2,873	25,679(4)
1980	139,048	3,155	1,771.8	9,525	8,197,267	8,394	815	2,781	23,853
1981	139,783	3,157	1,559.4	8,285	8,055,610	8,257	826	2,817	22,534
1982	112,364	2,552	1,480.9	7,794	6,935,673	7,116	745	2,542	20,015
1983	109,735	2,490	1,408.0	7,423	6,615,907	6,821	776	2,648	19,399
1984	126,070	2,842	1,503.6	7,897	7,232,039	7,449	839	2,862	21,071
1985	125,340	2,760	1,466.5	7,715	6,867,119	7,080	835	2,850	20,423
1986	119,065	2,643	1,488.1	7,939	6,504,373	6,693	808	2,758	20,048
1987	119,432	2,673	1,547.7	8,189	7,045,587	7,264	845	2,884	21,052
1988	125,050	2,797	1,600.0	8,443	7,544,132	7,778	884	3,016	22,106

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.
(4) Total includes small amounts of imported coke.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1988: Energy Information Administration, Monthly Energy Review, January 1989

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE HOUSEHOLD AND COMMERCIAL SECTOR

Year	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	128,657	3,399	385.3	2,251	1,087,000	1,125	115	391	7,148
1948	122,994	3,238	436.0	2,539	1,219,402	1,262	130	442	7,481
1949	114,639	3,025	425.5	2,472	1,340,362	1,387	143	488	7,372
1950	110,422	2,913	526.2	3,038	1,586,207	1,642	160	546	8,139
1951	100,057	2,648	552.0	3,202	1,939,034	2,007	180	615	8,471
1952	91,212	2,416	577.1	3,350	2,137,635	2,213	195	666	8,645
1953	77,976	2,072	585.4	3,391	2,216,153	2,294	215	733	8,490
1954	65,425	1,752	630.4	3,650	2,479,205	2,566	234	797	8,765
1955	66,039	1,745	691.7	4,001	2,753,171	2,849	250	854	9,449
1956	61,685	1,629	721.8	4,183	3,044,435	3,151	274	935	9,898
1957	46,382	1,225	703.4	4,069	3,276,185	3,391	299	1,019	9,704
1958	45,005	1,187	788.3	4,568	3,586,025	3,712	321	1,095	10,562
1959	36,700	969	817.5	4,718	3,887,708	4,024	353	1,203	10,914
1960	37,180	983	853.3	4,923	4,123,389	4,268	370	1,262	11,436
1961	32,805	868	871.9	5,028	4,325,427	4,477	406	1,385	11,758
1962	32,955	872	907.7	5,227	4,685,231	4,849	437	1,490	12,438
1963	27,603	731	915.0	5,258	4,856,804	5,027	482	1,645	12,661
1964	22,949	609	903.7	5,191	5,162,009	5,343	525	1,792	12,935
1965	25,676	678	978.0	5,635	5,346,450	5,517	571	1,948	13,778
1966	25,587	677	1,000.1	5,766	5,760,999	5,945	616	2,101	14,489
1967	22,134	585	1,078.9	6,206	6,029,855	6,223	661	2,257	15,271
1968	19,983	529	1,069.5	6,129	6,250,997	6,451	723	2,467	15,576
1969	16,875	447	1,099.6	6,269	6,682,804	6,890	807	2,752	16,358

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West. "United States Energy Through The Year 2000," December 1972

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE HOUSEHOLD AND COMMERCIAL SECTOR

Year	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	16,114	427	1,128.4	6,453	6,984,007	7,108	879	3,000	16,988
1971	15,201	406	1,124.9	6,430	7,480,667	7,713	940	3,209	17,758
1972	11,708	308	1,168.4	6,666	7,733,964	7,943	1,019	3,478	18,395
1973	10,210	254	815.1	4,391	7,476,470	7,626	1,024	3,495	15,766
1974	10,370	257	743.2	3,996	7,341,797	7,518	1,018	3,475	15,246
1975	8,446	209	710.2	3,805	7,432,352	7,581	1,056	3,604	15,200
1976	8,165	203	776.7	4,181	7,719,333	7,866	1,098	3,747	15,997
1977	8,299	205	780.5	4,206	7,321,884	7,461	1,159	3,955	15,828
1978	8,736	214	756.2	4,070	7,503,937	7,624	1,206	4,116	16,023
1979	7,594	187	630.2	3,448	7,751,473	7,891	1,226	4,184	15,709
1980	5,863	145	555.1	3,035	7,347,953	7,540	1,276	4,355	15,075
1981	6,825	167	487.0	2,634	7,065,366	7,243	1,318	4,497	14,540
1982	7,731	187	454.2	2,449	7,244,639	7,427	1,338	4,566	14,630
1983	7,979	192	472.6	2,498	6,813,773	7,025	1,372	4,680	14,396
1984	8,693	209	491.4	2,585	7,078,641	7,291	1,443	4,922	15,007
1985	7,572	176	494.5	2,573	6,865,179	7,078	1,487	5,072	14,898
1986	7,447	176	491.8	2,576	6,631,681	6,824	1,539	5,251	14,827
1987	6,922	162	499.1	2,618	6,729,3[illegible]9	6,938	1,606	5,481	15,199
1988	7,666	177	515.4	2,700	7,313,288	7,540	1,678	5,727	16,145

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(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponsing to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1970--U.S. Bureau of Mines, Minerals Yearbook 1972
1971-1972--U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1988--Energy Information Administration, Monthly Energy Review, January 1989

Section I
Table 11

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE TRANSPORTATION SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1947	113,324	3,030	1,050.3	5,761	Neg.	--	8	29	8,820
1948	98,295	2,624	1,126.6	6,157	Neg.	--	8	27	8,808
1949	70,915	1,892	1,137.8	6,183	Neg.	--	7	25	8,100
1950	63,783	1,701	1,248.8	6,785	125,546	130	7	24	8,640
1951	56,903	1,525	1,377.5	7,482	192,496	199	7	23	9,229
1952	40,428	1,086	1,461.3	7,868	207,207	214	6	22	9,190
1953	30,074	809	1,511.5	8,158	230,314	238	6	20	9,225
1954	19,060	516	1,551.4	8,358	230,615	239	6	18	9,131
1955	17,429	464	1,691.4	9,109	245,246	253	6	19	9,845
1956	14,187	378	1,756.2	9,448	295,972	306	5	17	10,149
1957	10,126	270	1,832.0	9,649	299,235	310	4	15	10,244
1958	5,015	133	1,825.1	9,819	312,221	323	5	16	10,291
1959	3,861	102	1,849.4	9,923	349,348	362	5	17	10,404
1960	3,294	87	1,934.1	10,372	347,075	359	5	18	10,836
1961	770	21	1,971.9	10,575	377,607	390	6	19	11,005
1962	687	18	2,051.3	11,001	382,496	396	5	18	11,433
1963	67C	18	2,146.7	11,506	423,783	438	6	19	11,981
1964	711	19	2,198.9	11,791	435,570	451	6	20	12,281
1965	655	18	2,271.9	12,179	500,524	517	5	18	12,732
1966	609	16	2,382.6	12,777	535,353	552	5	16	13,361
1967	467	13	2,497.1	13,408	575,752	594	5	17	14,032
1968	417	11	2,703.8	14,535	590,965	610	5	18	15,174
1969	313	8	2,815.8	15,125	630,962	651	5	17	15,801

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(1) Includes anthracite, bituminous, and lignite coals.

(2) Includes bunkers and military transportation.

(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior. W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000," December 1972.

UNITED STATES
DEMAND FOR ENERGY INPUTS IN THE TRANSPORTATION SECTOR

	COAL(1)		PETROLEUM(2)		NATURAL GAS		ELECTRICITY PURCHASED(3)		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Billion Kilowatt-hours	Trillion Btu	Trillion Btu
1970	298	8	2,923.8	15,720	772,166	745	5	16	16,489
1971	207	6	3,035.1	16,304	742,592	766	5	17	17,093
1972	163	4	3,217.5	17,290	766,156	787	5	17	18,098
1973	112	3	3,305.1	17,831	728,431	743	3	8	18,605
1974	38	2	3,220.1	17,399	668,945	685	3	9	18,117
1975	0	1	3,266.7	17,614	583,333	595	3	10	18,244
1976	0	0	3,430.2	18,506	548,577	559	3	10	19,101
1977	0	0	3,563.1	19,241	532,875	543	3	10	19,819
1978	0	0	3,708.5	20,041	530,512	539	3	9	20,611
1979	0	0	3,652.4	19,825	601,179	612	3	10	20,472
1980	0	0	3,494.1	19,008	634,766	650	3	11	19,695
1981	0	0	3,463.0	18,811	641,951	658	3	11	19,507
1982	0	0	3,397.3	18,420	596,491	612	3	11	19,069
1983	0	0	3,432.2	18,589	489,817	505	3	11	19,131
1984	0	0	3,554.5	19,283	529,126	545	4	13	19,869
1985	0	0	3,603.9	19,544	503,395	519	4	14	20,109
1986	0	0	3,730.2	20,229	484,937	499	4	12	20,770
1987	0	0	3,835.0	20,801	518,914	535	4	13	21,378
1988	0	0	3,919.4	21,255	544,132	561	4	12	21,856

(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes bunkers and military transportation.
(3) Utility electricity, generated and imported, distributed on basis of historical series in the Edison Electric Institute Yearbook. Conversion of electricity to energy equivalent was made at the value of contained energy corresponding to 100-percent efficiency using a theoretical rate of 3,412 Btu per kilowatt-hour.

Source: U.S. Department of the Interior: 1970-1972: U.S. Bureau of Mines, Press Release, February 1977
U.S. Department of Energy: 1973-1988: Energy Information Administration, Monthly Energy Review, January 1989

Section I
Table 12

UNITED STATES
DEMAND FOR ENERGY INPUTS FOR ELECTRICITY GENERATION BY UTILITIES

	COAL(1)		PETROLEUM		NATURAL GAS		HYDROPOWER(2)		NUCLEAR POWER		TOTAL ENERGY INPUTS
Year	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Trillion Btu
1947	89,531	2,084	75.5	468	373,037	386	84,981	1,326	--	--	4,264
1948	99,586	2,392	71.7	444	478,097	495	88,535	1,393	--	--	4,724
1949	83,964	2,021	92.7	577	550,121	569	96,361	1,449	--	--	4,616
1950	91,871	2,228	106.3	662	628,919	651	102,671	1,440	--	--	4,981
1951	105,768	2,537	80.1	499	763,898	791	106,554	1,454	--	--	5,281
1952	107,071	2,588	78.8	492	910,117	942	111,977	1,496	--	--	5,518
1953	115,883	2,805	92.3	577	1,034,272	1,070	111,625	1,439	--	--	5,891
1954	118,401	2,866	76.8	480	1,165,498	1,206	113,980	1,388	--	--	5,940
1955	143,759	3,482	81.9	512	1,153,280	1,194	120,304	1,407	--	--	6,595
1956	158,279	3,815	79.4	497	1,239,311	1,283	129,775	1,487	--	--	7,082
1957	160,761	3,881	81.9	512	1,338,079	1,385	136,959	1,551	10	1	7,330
1958	155,714	3,743	82.4	515	1,372,853	1,421	147,581	1,636	165	2	7,317
1959	168,427	4.050	87.2	546	1,627,097	1,684	145,002	1,591	188	2	7,873
1960	176,633	4,251	90.1	564	1,724,763	1,785	153,958	1,657	518	6	8,263
1961	182,138	4,374	92.1	577	1,825,341	1,889	157,754	1,680	1,692	17	8,537
1962	193,128	4,636	92.4	579	1,965,590	2,034	172,458	1,821	2,270	23	9,093
1963	211,193	5,065	95.7	600	2,142,930	2,218	168,573	1,767	3,212	33	9,683
1964	225,271	5,395	101.4	636	2,321,889	2,403	182,258	1,907	3,341	34	10,375
1965	244,887	5,843	118.6	744	2,318,253	2,392	196,843	2,058	3,657	38	11,075
1966	266,394	6,327	144.2	905	2,608,768	2,692	199,030	2,073	5,520	57	12,054
1967	273,970	6,457	161.3	1,013	2,746,352	2,834	224,650	2,344	7,655	80	12,728
1968	296,942	6,994	188.0	1,181	3,143,858	3,245	225,242	2,342	12,528	130	13,892
1969	310,310	7,227	259.8	1,628	3,486,391	3,594	254,540	2,659	13,928	146	15,254
1970	322,357	7,261	333.8	2,087	3,894,019	4,015	252,571	2,650	21,801	229	16,242
1971	327,926	7,330	407.1	2,543	3,992,983	4,117	269,899	2,828	37,899	404	17,222
1972	350,196	7,836	503.7	3,134	3,978,673	4,086	280,470	2,911	54,032	576	18,543
1973	388,194	8,658	562.9	3,515	3,660,156	3,748	286,361	2,975	83,463	910	19,853
1974	391,809	8,534	539.4	3,365	3,443,249	3,519	313,733	3,276	113,968	1,272	20,022

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(1) Includes anthracite, bituminous, and lignite coals
(2) Includes net inputs and negligible amount of hydropower generated by industrial establishments

Source: U.S. Department of the Interior: 1947-1969: W.G. Dupree Jr. and J.A. West, "United States Energy Through the Year 2000", December 1972
1970-1972: U.S. Bureau of Mines, Minerals Yearbook 1975
1973-1974: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review

UNITED STATES
DEMAND FOR ENERGY INPUTS FOR ELECTRICITY GENERATION BY UTILITIES

Year	COAL(1)		PETROLEUM		NATURAL GAS		HYDROPOWER(2)		NUCLEAR POWER		TOTAL ENERGY INPUTS(3)
	Thousand Short Tons	Trillion Btu	Million Barrels	Trillion Btu	Million Cubic Feet	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Million Kilowatt-hours	Trillion Btu	Trillion Btu
1975	405,970	8,786	506.6	3,166	3,157,895	3,240	306,266	3,187	172,523	1,900	20,350
1976	448,360	9,720	556.2	3,477	3,081,134	3,152	292,297	3,032	191,093	2,111	21,573
1977	477,125	10,262	624.3	3,901	3,191,448	3,284	237,853	2,482	250,905	2,702	22,713
1978	481,222	10,238	637.8	3,987	3,188,588	3,297	300,164	3,110	276,392	3,024	23,724
1979	527,055	11,260	524.6	3,283	3,490,821	3,613	300,106	3,107	255,171	2,776	24,128
1980	569,289	12,123	421.2	2,634	3,681,159	3,810	296,918	3,085	251,128	2,739	24,505
1981	596,775	12,583	351.9	2,202	3,640,580	3,768	293,887	3,072	272,711	3,008	24,760
1982	593,659	12,582	250.6	1,568	3,225,869	3,342	338,531	3,539	282,760	3,131	24,270
1983	625,231	13,213	246.8	1,544	2,910,680	2,998	367,490	3,890	293,718	3,203	24,956
1984	664,423	14,020	205.7	1,286	3,111,111	3,220	360,845	3,845	327,677	3,553	25,977
1985	693,831	14,542	174.5	1,090	3,044,316	3,160	322,081	3,330	383,705	4,149	26,484
1986	685,069	14,444	232.1	1,452	2,602,515	2,691	325,771	3,353	414,020	4,471	26,643
1987	725,183	15,173	201.2	1,257	2,843,992	2,935	296,001	3,035	445,271	4,906	27,551
1988	757,540	15,850	249.8	1,561	2,634,690	2,719	251,926	2,583	526,912	5,678	28,628

(1) Includes anthracite, bituminous, and lignite coals.
(2) Includes net inputs and negligible amount of hydropower generated by industrial establishments.
(3) Total includes small amounts of geothermal power and electricity from wood and waste.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review, January 1989

WORLD PRIMARY ENERGY PRODUCTION(1)
(Quadrillion Btu)

Region and Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Canada	9.50	9.38	8.89	8.68	9.03	9.14	9.99	10.04	9.75	9.64	10.11
Mexico	1.87	2.15	2.44	2.74	3.14	3.76	4.51	5.80	6.78	7.82	7.70
United States	61.95	60.72	59.73	59.81	60.14	61.03	63.71	64.64	64.30	63.79	61.08
Total North America	73.32	72.25	71.06	71.22	72.31	73.93	78.22	80.48	80.83	81.25	78.90
Venezuela	8.13	7.29	5.90	5.79	5.89	5.52	6.04	5.71	5.58	5.22	4.99
Total Central & South America	12.85	12.09	10.62	10.67	10.88	11.19	12.23	12.15	12.13	12.04	12.21
France	1.78	1.82	1.88	1.71	2.00	2.02	2.03	2.26	2.65	2.62	2.97
West Germany	4.92	4.95	4.87	5.14	5.12	5.12	5.44	5.44	5.57	5.72	5.53
Italy	1.06	1.07	1.08	1.11	1.15	1.13	1.10	1.07	1.11	1.16	1.12
Netherlands	2.52	2.86	3.16	3.44	2.90	2.49	2.69	3.32	3.10	2.67	2.62
Norway	.83	.88	1.22	1.47	1.47	2.07	2.68	3.02	3.06	3.11	3.41
United Kingdom	4.66	4.47	4.97	5.39	6.58	7.19	8.24	8.40	8.71	9.49	9.92
Total Western Europe	19.58	20.01	21.36	22.34	23.93	24.81	27.40	28.65	29.73	30.65	31.86
Iran	13.27	13.68	12.23	13.43	12.88	11.93	7.46	3.91	3.28	5.12	5.67
Iraq	4.35	4.25	4.89	5.25	5.08	5.53	7.49	5.45	2.16	2.19	2.17
Kuwait	6.75	5.67	4.68	4.84	4.46	4.90	5.78	3.88	2.70	1.98	2.51
Saudi Arabia	18.63	18.68	15.68	18.88	20.51	18.45	21.24	22.48	22.57	14.86	11.69
United Arab Emirates	3.27	3.56	3.56	4.20	4.45	4.09	4.12	3.89	3.45	3.00	2.91
Total Middle East	46.61	48.33	43.58	49.13	49.77	47.30	48.65	42.13	36.73	29.54	27.29
Algeria	2.47	2.35	2.34	2.65	2.63	3.28	3.16	2.75	2.95	3.11	3.46
Libya	4.72	3.32	3.27	4.26	4.53	4.40	4.63	4.03	2.57	2.61	2.52
Nigeria	4.45	4.89	3.88	4.51	4.50	4.06	4.95	4.50	3.18	2.86	2.77
South Africa	1.48	1.57	1.65	1.84	2.03	2.15	2.46	2.74	3.09	3.24	3.45
Total Africa	14.81	13.93	13.19	15.49	16.44	16.70	18.10	17.35	15.09	15.42	16.12
Australia	3.25	3.44	3.64	3.35	3.43	3.51	3.66	3.53	3.89	4.04	4.24
China	13.14	14.25	15.11	15.35	16.16	18.05	18.53	18.32	18.10	19.13	20.46
India	2.22	2.36	2.68	2.88	2.95	3.14	3.30	3.35	4.09	4.43	4.87
Indonesia	2.90	2.99	2.90	3.38	3.85	3.71	3.83	4.16	4.27	3.65	3.84
Total Far East & Oceania	26.17	28.04	29.71	30.59	32.09	34.53	35.99	36.53	37.47	38.90	41.54
Poland	4.94	5.09	5.37	5.00	5.18	5.36	5.51	5.28	4.54	5.16	5.25
USSR	39.28	41.77	43.62	47.46	49.79	52.11	53.88	55.67	56.71	58.27	59.96
Total Eastern Europe & USSR	51.44	54.17	56.51	60.23	62.95	65.40	67.52	69.20	69.67	72.18	74.15
TOTAL WORLD	244.78	248.81	246.03	259.67	268.37	273.87	288.31	286.50	281.66	279.98	282.07

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(1) Includes only crude oil, lease condensate, natural gas plant liquids, dry natural gas, coal, net hydroelectric power and net nuclear power.

Source: Department of Energy, Energy Information Administration, International Energy Annual.

WORLD PRIMARY ENERGY PRODUCTION(1)
(Quadrillion BTU)

REGION AND COUNTRY	1984	1985	1986	1987(p)
Canada	10.98	11.76	11.67	12.17
Mexico	7.88	7.74	7.15	7.38
United States	65.67	64.55	63.99	64.35
Total North America	84.53	84.06	82.81	83.90
Venezuela	5.02	4.77	5.14	5.09
Total Central & South America	13.13	13.43	14.08	14.08
France	3.38	3.56	3.82	3.94
West Germany	5.73	6.03	5.77	5.79
Italy	1.17	1.18	1.26	1.18
Netherlands	2.71	2.82	2.71	2.78
Norway	3.65	3.82	3.97	4.48
United Kingdom	8.86	10.18	10.63	10.47
Total Western Europe	32.33	34.91	35.76	36.73
Iran	5.29	5.57	5.06	5.94
Iraq	2.61	3.09	3.66	4.55
Kuwait	2.76	2.44	3.36	3.23
Saudi Arabia	11.29	8.55	11.91	10.56
United Arab Emirates	3.00	3.29	3.68	4.12
Total Middle East	27.66	25.67	30.63	31.54
Algeria	3.71	3.77	3.56	3.75
Libya	2.53	2.46	2.43	2.28
Nigeria	3.12	3.35	3.33	3.03
South Africa	3.87	4.17	4.26	4.22
Total Africa	17.53	18.44	18.18	18.29
Australia	4.42	5.34	5.49	5.99
China	22.39	24.14	24.90	26.08
India	5.21	5.52	5.96	5.77
Indonesia	4.27	4.24	4.33	4.28
Total Far East & Oceania	45.10	48.99	51.10	52.95
Poland	5.37	5.54	5.72	5.86
USSR	62.00	63.81	66.38	68.46
Total Eastern Europe & USSR	76.51	78.64	81.49	83.84
TOTAL WORLD	296.79	304.12	314.05	321.33

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(1) Includes only crude oil, lease condensate, natural gas plant liquids, dry natural gas, coal, net hydroelectric power and net nuclear power.

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

WORLD COAL PRODUCTION(1)
(Million Short Tons)

Region and Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Canada	23	23	28	28	32	34	37	40	44	47	50	63
Mexico	5	6	6	6	7	7	8	8	8	8	10	10
United States	599	610	655	685	697	670	781	830	824	838	782	896
Total North America	626	639	688	719	736	711	826	878	876	894	841	969
Total Central & South America	8	9	9	10	10	10	16	16	14	16	16	18
West Germany	238	244	238	247	229	228	239	239	241	247	236	233
United Kingdom	143	121	142	137	135	136	135	141	138	137	127	55
Yugoslavia	36	37	39	41	43	44	46	52	58	60	65	72
Total Western Europe	508	488	509	518	506	509	529	543	561	577	571	510
South Africa	69	73	77	85	94	100	114	127	144	151	161	179
Total Africa	75	78	82	91	100	106	121	133	149	157	167	184
Australia	94	100	105	109	111	114	119	116	130	140	146	153
China	520	548	570	586	606	681	698	684	683	734	788	870
India	89	96	109	116	115	116	118	125	142	148	158	168
Total Middle East, Far East & Oceania	800	842	890	911	934	1,014	1,042	1,036	1,068	1,136	1,205	1,307
Czechoslovakia	120	122	127	130	134	136	137	136	137	139	140	143
East Germany	272	269	272	273	280	279	282	285	294	304	309	327
Poland	216	222	233	241	250	258	264	254	219	250	258	267
U.S.S.R.	736	755	773	784	796	798	792	790	776	792	789	785
Total Eastern Europe & USSR	1,431	1,454	1,494	1,513	1,546	1,560	1,571	1,566	1,529	1,593	1,601	1,635
TOTAL WORLD	3,447	3,511	3,673	3,763	3,834	3,911	4,105	4,173	4,198	4,375	4,402	4,623

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(1) Includes anthracite, subanthracite, bituminous, subbituminous, lignite and brown coal.

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

WORLD COAL PRODUCTION(1)
(Million Short Tons)

Region and Country	1985	1986	1987(p)
Canada	67	64	67
Mexico	9	9	9
United States	884	890	917
Total North America	960	964	993
Total Central & South America	21	23	24
West Germany	231	222	211
United Kingdom	104	119	115
Yugoslavia	75	77	83
Total Western Europe	570	584	577
South Africa	192	195	194
Total Africa	198	201	201
Australia	186	187	206
China	937	959	1,014
India	173	188	203
Total Middle Ease, Far East & Oceania	1,422	1,463	1,552
Czechoslovakia	140	139	139
East Germany	344	343	342
Poland	275	286	293
U.S.S.R.	798	825	830
Total Eastern Europe & USSR	1,671	1,709	1,723
TOTAL WORLD	4,844	4,944	5,071

(1) Includes anthracite, subanthracite, bituminous, subbituminous, lignite and brown coal.
NA=Not Available

Source: Department of Energy, Energy Information Administration, International Energy Annual 1987.

U.S. GOVERNMENT ENERGY USE BY AGENCY, BY SOURCE
(Fiscal Year, Trillion BTU)

1977

AGENCY	Petroleum Motor Gasoline	Distillate and Residual Fuel Oils	Other(1)	Total	Electricity	Natural Gas	Coal and Other(2)	Total
Defense	31.9	308.4	623.3	936.6	291.2	98.0	45.7	1,398.4
Energy	1.3	5.2	0.4	6.9	51.4	9.9	19.7	87.9
Postal Service	10.8	3.8	0.1	14.7	42.2	4.4	1.6	62.9
GSA	0.2	2.7	0	2.9	29.3	4.1	4.9	37.9
Veteran's Admin.	0.6	7.3	0	7.9	16.4	12.0	1.7	41.1
Transportation	1.6	8.3	5.7	15.5	11.7	1.2	0.3	28.8
NASA	0.4	1.5	1.3	3.2	16.5	3.1	1.2	24.0
Agriculture	4.9	1.2	0.3	6.3	2.7	1.7	0	10.8
Interior	2.8	2.5	0.6	5.9	5.6	1.9	0.1	13.8
Health & Human Serv.	0.7	3.1	0.1	3.9	4.2	1.7	0.1	9.9
Justice	2.0	0.9	0.1	3.0	2.3	1.9	0.5	7.5
Other(3)	3.8	3.7	0.4	7.9	6.3	1.3	0.4	15.9
TOTAL	60.9	348.5	632.1	1,041.6	479.7	141.2	76.1	1,738.6

1987

AGENCY	Petroleum Motor Gasoline	Distillate and Residual Fuel Oils	Other(1)	Total	Electricity	Natural Gas	Coal and Other(2)	Total
Defense(p)	20.2	273.0	697.5	990.7	352.6	100.4	52.4	1,497.8
Energy	1.4	3.1	0.6	5.1	63.5	6.1	18.5	93.2
Postal Service	9.2	3.9	0.2	13.3	34.9	4.3	1.0	53.4
GSA	0.1	0.5	0	0.6	26.3	2.4	3.0	32.4
Veteran's Admin.	0.5	2.4	0	2.9	24.3	13.7	1.2	42.0
Transportation	1.2	7.5	5.4	14.1	13.1	1.1	0	28.3
NASA	0.2	0.9	1.3	2.3	19.7	2.6	0.4	25.1
Agriculture	3.4	0.3	0.2	3.9	5.9	1.6	0	11.4
Interior	2.0	1.3	0.9	4.2	4.2	1.0	0.2	9.7
Health & Human Serv.	0.4	2.5	0.1	3.0	6.6	1.6	0	11.2
Justice(p)	1.9	0.4	0.1	2.4	4.1	1.7	0.5	8.7
Other(3)(p)	3.0	1.9	0.7	5.7	8.1	1.5	0.3	17.1
TOTAL	43.5	297.7	707.0	1,048.2	563.3	138.0	80.2	1,830.3

(p) Preliminary.
(1) Includes aviation gasoline, jet fuel, and liquefield petroleum gases.
(2) Includes purchased steam.
(3) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review 1987.

U.S. GOVERNMENT ENERGY USE(1)
(Fiscal Year, Trillion BTU)

AGENCY	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Defense	1,558.1	1,386.8	1,398.4	1,365.7	1,384.6	1,394.8	1,455.4	1,484.3	1,475.1	1,524.1	1,509.6
Energy	85.2	87.2	87.9	87.1	86.9	84.0	85.3	89.1	91.3	95.5	96.7
Postal Service	59.2	58.3	62.9	58.6	56.0	52.3	50.9	49.4	48.4	50.5	50.9
GSA	43.0	41.1	41.1	41.3	40.5	38.9	39.1	38.9	37.8	35.4	35.4
Veteran's Admin.	39.2	36.5	37.9	39.4	38.5	38.2	37.4	38.0	38.7	40.6	40.6
Transportation	28.5	27.4	28.8	28.9	27.6	27.6	28.0	28.5	28.7	29.5	29.5
NASA	26.4	25.1	24.0	22.4	22.4	21.4	21.2	21.8	22.4	23.0	23.3
Agriculture	11.9	11.6	10.8	11.2	11.6	11.2	10.9	10.4	10.4	10.7	10.2
Interior	12.3	13.1	13.5	12.3	13.6	11.7	10.7	10.7	10.8	11.8	10.6
Health & Human Serv.	9.3	9.6	9.9	9.6	9.7	9.5	10.6	10.2	10.3	10.8	11.3
Justice	7.1	7.1	7.5	7.4	8.1	7.4	7.1	7.7	7.6	8.9	8.1
Other(2)	14.8	15.0	15.9	17.1	16.8	16.6	17.1	18.5	17.1	17.7	16.5
TOTAL	1,895.0	1,718.9	1,738.6	1,701.0	1,716.3	1,713.5	1,773.7	1,807.5	1,798.6	1,860.2	1,842.7
ENERGY SOURCE											
Petroleum	1,162.0	1,015.8	1,041.5	1,002.3	1,012.7	1,011.5	1,065.8	1,082.5	1,060.7	1,093.6	1,067.4
Motor Gasoline	63.4	59.9	60.9	59.6	58.6	56.1	52.9	52.9	51.4	51.0	50.5
Aviation Gasoline	21.1	11.6	8.8	6.2	4.7	4.9	4.6	3.6	2.6	1.9	1.9
Jet Fuel	707.4	610.0	619.2	601.2	618.6	638.7	653.3	672.7	673.3	693.7	705.6
Distillate & Residual	364.7	329.7	348.5	332.3	327.1	307.8	351.3	349.5	329.4	342.9	305.4
LPG's	5.4	4.6	4.1	3.0	3.7	4.0	3.7	3.8	4.0	4.1	4.0
Electricity	481.2	473.5	479.7	479.2	479.9	482.2	491.5	501.6	515.2	530.1	548.2
Natural Gas	166.2	151.8	141.2	144.7	148.9	147.3	142.2	146.2	147.8	157.4	146.7
Coal	77.9	71.3	68.4	66.0	65.1	63.6	65.1	68.6	62.4	65.3	64.0
Purchased Steam	7.6	6.3	7.7	8.7	9.7	9.1	9.1	8.6	12.4	13.8	16.4
TOTAL	1,895.0	1,718.9	1,738.6	1,701.0	1,716.3	1,713.5	1,773.7	1,807.5	1,798.6	1,860.2	1,842.7

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(1) Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. However, other energy used by U.S. agencies that produce electricity or enrich uranium is included.

(2) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission, and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review.

Section I
Table 16a

U.S. GOVERNMENT ENERGY USE(1)
(Fiscal Year, Trillion BTU)

AGENCY	1986	1987(p)
Defense	1,488.1	1,497.8
Energy	92.0	93.2
Postal Service	51.5	53.4
GSA	34.1	32.4
Veteran's Admin.	41.8	42.0
Transportation	28.1	28.3
NASA	24.6	25.1
Agriculture	10.6	11.4
Interior	10.0	9.7
Health & Human Serv.	10.7	11.2
Justice	8.7	8.7
Other(2)	16.8	17.1
TOTAL	1,817.0	1,830.3
ENERGY SOURCE		
Petroleum	1,058.8	1,048.2
Motor Gasoline	45.3	43.5
Aviation Gasoline	1.4	0.9
Jet Fuel	710.2	702.3
Distillate & Residual	298.0	297.7
LPG's	3.9	3.8
Electricity	539.8	563.3
Natural Gas	138.7	138.0
Coal	63.8	60.5
Purchased Steam	15.9	19.7
TOTAL	1,817.0	1,830.3

(p) Preliminary.

(1) Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. however, other energy used by U.S. agencies that produce electricity or enrich uranium is included.

(2) Includes Department of Commerce, Panama Canal Commission, Tennessee Valley Authority, Department of Labor, National Science Foundation, Department of Treasury, Federal Communications Commission, and Environmental Protection Agency.

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review 1987.

BASIC PETROLEUM DATA BOOK

SECTION II. RESERVES, CRUDE OIL

Table 1. Estimated Proved World Reserves of Crude Oil

Table 2. The Reserves of United States Crude Oil

Table 3. U.S. Proved Crude Oil Reserves by State

Table 4. Estimated World Proven Crude Oil Reserves -- Twenty Leading Nations

Table 5. USGS Estimates of U.S. Oil and Gas Resources

Section II
Table 1

ESTIMATED PROVED RESERVES OF CRUDE OIL ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	United States	Canada	Latin America	Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist Nations	Total World
1948	21,487.7	125.0	10,085.0	31,697.7	28,550.0	100.0	1,300.0	50.0	61,697.7	6,500.0	68,197.7
1949	23,280.4	500.0	10,880.0	34,660.4	32,621.0	122.0	1,372.0	179.0	68,954.4	4,645.0	73,599.4
1950	24,649.5	1,200.0	11,400.8	37,250.3	32,413.0	202.5	1,557.0	289.0	71,711.7	4,741.0	76,452.7
1951	25,268.4	1,202.6	11,525.0	37,996.0	41,567.0	188.0	1,765.0	445.4	81,961.4	7,965.0	89,926.4
1952	27,468.0	1,376.6	12,710.9	41,555.5	51,320.0	175.0	1,965.5	501.5	95,517.5	7,927.0	103,444.5
1953	27,960.6	1,679.5	11,883.5	41,523.6	64,825.0	163.0	2,062.0	472.7	109,046.3	9,408.0	118,454.3
1954	28,944.8	1,845.4	13,182.0	43,972.3	78,160.0	158.0	2,583.0	641.5	125,514.8	9,455.0	134,969.8
1955	29,560.7	2,207.6	14,356.0	46,124.4	97,459.0	112.0	2,708.0	1,049.2	147,452.6	10,047.0	157,499.6
1956	30,012.2	2,509.5	15,515.0	48,036.7	126,271.0	169.0	3,000.0	1,261.0	178,737.7	10,833.0	189,570.7
1957	30,434.6	2,849.4	17,474.0	50,758.0	144,470.0	285.0	6,140.0	1,305.0	202,958.0	25,000.0	227,958.0
1958	30,300.4	2,874.6	21,003.5	54,178.4	169,566.0	814.0	8,578.0	1,304.0	234,440.4	26,200.0	260,640.4
1959	30,535.9	3,165.9	21,843.0	55,544.8	173,951.0	4,118.5	9,646.5	1,437.0	244,697.8	27,705.0	272,402.8
1960	31,719.3	3,497.1	24,435.6	59,652.1	181,436.0	7,273.5	10,175.5	1,496.0	260,033.1	30,002.0	290,035.1
1961	31,613.2	3,678.5	25,061.8	60,353.6	183,160.0	8,099.5	10,906.5	1,722.0	264,241.6	33,502.0	297,743.6
1962	31,758.5	4,173.6	24,706.0	60,638.1	188,204.0	9,709.5	10,867.6	1,736.0	271,155.2	34,252.0	305,407.2
1963	31,389.2	4,480.7	24,225.5	60,095.4	193,975.0	12,345.5	11,331.1	1,791.0	279,538.0	29,976.0	309,514.0
1964	30,970.0	4,881.5	24,305.0	60,156.5	207,368.0	16,375.5	11,621.2	1,925.6	297,446.8	29,500.0	326,946.8
1965	30,990.5	6,177.5	25,525.0	62,693.1	212,180.0	19,395.6	11,613.7	2,035.6	307,918.0	30,750.0	338,668.0
1966	31,352.4	6,711.2	25,170.5	63,234.1	215,360.0	23,049.0	11,008.8	2,085.0	314,736.9	33,377.0	348,118.9
1967	31,452.1	7,791.8	27,100.3	66,344.2	235,614.6	32,355.5	11,808.5	1,924.5	348,047.3	33,838.0	381,885.3
1968	31,376.7	8,168.9	26,907.3	66,452.8	249,209.0	42,285.3	11,815.9	2,017.0	371,780.0	35,773.0	407,553.0
1969	30,707.1	8,381.6	28,782.8	67,871.5	270,760.0	44,568.8	13,720.2	1,937.0	398,857.5	55,877.0	454,734.5
1970	29,631.9	8,619.8	29,179.8	67,431.4	333,506.0	54,679.5	13,138.2	1,779.0	470,534.1	60,000.0	530,534.1
1971	39,001.3	8,559.0	26,185.3	73,745.6	344,574.9	74,757.5	14,408.6	3,708.5	511,195.1	100,000.0	611,195.1
1972	38,063.0	8,333.1	31,558.8	77,954.8	367,386.0	58,886.2	15,604.5	14,222.0	534,053.5	98,500.0	632,553.5
1973	36,339.4	8,020.1	32,601.8	76,961.3	355,852.0	106,402.0	14,922.3	12,082.0	566,219.6	98,000.0	664,219.6
1974	35,299.8	7,674.2	31,640.3	74,614.2	350,162.5	67,303.8	15,635.0	15,991.0	523,706.5	103,000.0	626,706.5
1975	34,250.0	7,171.2	40,578.0	81,999.2	403,858.2	68,299.5	21,047.7	25,814.0	601,018.5	111,400.0	712,418.5
1976	32,682.1	6,653.0	35,368.0	74,703.1	368,410.6	65,085.2	21,234.2	25,487.7	554,920.8	103,000.0	657,920.8
1977	33,502.0	6,247.1	29,609.0	69,358.0	367,681.2	60,570.2	19,391.1	24,538.8	541,539.4	101,100.0	642,639.4
1978	31,780.0	5,970.9	40,270.0	78,020.9	366,166.0	59,200.2	19,749.3	26,862.5	549,998.8	98,000.0	647,998.8
1979	31,355.0	6,860.0	41,246.5	79,461.5	369,996.0	57,892.1	20,007.2	23,966.0	551,322.8	94,000.0	645,322.8
1980	27,051.3	6,800.0	56,472.5	90,323.8	361,947.3	57,072.1	19,355.2	23,476.4	522,174.8	90,000.0	642,174.8
1981	29,805.0	6,400.0	69,489.8	105,694.8	362,071.0	55,148.4	19,630.5	23,085.0	565,629.7	86,300.0	651,929.7
1982	29,426.0	7,300.0	84,982.3	121,708.3	362,840.0	56,171.6	19,150.8	24,634.5	584,505.2	85,845.0	670,350.2
1983	27,858.0	7,020.0	78,482.1	113,360.1	369,285.9	57,821.7	19,756.1	22,923.7	583,147.4	85,115.0	668,262.4
1984	27,735.0	6,730.0	81.675.9	118,140.9	370,100.8	56,907.0	18,969.4	23,019.5	585,137.6	84,600.0	669,737.6
1985	28,446.0	7,075.0	83,315.7	117,690.7	398,380.8	55,540.6	18,529.9	24,425.5	615,713.4	84,100.0	699,813.4

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(1) For 1971-1974 figures include 6 billion barrels in Prudhoe Bay, Permo-Triassic Reservoir, Alaska (discovered in 1968) which are not yet available for production due to lack of transportation facilities.

Source: 1948-1976--United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
1977-1985--United States, U.S. Energy Information Administration
Canada, Canadian Petroleum Association (1952-1980)
Rest of the World, Oil and Gas Journal, "Worldwide Report" Issues

Section II
Table 1a

ESTIMATED PROVED RESERVES OF CRUDE OIL
ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist Nations	Total World
1986	28,416.0	6,500.0	84,242.4	119,158.4	398,035.7	56,734.1	18,855.8	26,412.6	619,196.6	81,370.0	700,566.6
1987	26,889.0	6,850.0	88,755.3	122,494.3	401,878.7	55,194.1	19,023.5	21,938.1	620,528.7	79,250.0	699,778.7
1988	27,256.0	6,825.0	114,332.0	148,413.0	564,680.3	55,249.7	19,353.7	22,447.8	810,144.5	79,200.0	889,344.5
1989	26,500.0	6,785.5	121,950.7	155,236.2	571,518.8	56,963.8	21,367.4	18,556.6	823,642.8	83,800.0	907,442.8

Source: U.S.--DOE/EIA, Crude Oil, Natural Gas and Natural Gas Liquids Reserves Report, Annual.
Rest of World--Oil and Gas Journal, "Worldwide Report" issue.
1989--Oil and Gas Journal, "Worldwide Report" issue.

THE RESERVES OF UNITED STATES CRUDE OIL
(Thousands of barrels)

Year	Proved Reserves at Start of Year	Revisions Extensions and Discoveries, During Year	Production During Year (1)	Proved Reserves at Year-end	Indicated Years Supply of Year-end Proved Reserves
1947	20,873,560	2,464,570	1,850,445	21,487,685	11.6
1948	21,487,685	3,795,207	2,002,448	23,280,444	11.6
1949	23,280,444	3,187,845	1,818,800	24,649,489	13.6
1950	24,649,489	2,562,685	1,943,776	25,268,398	13.0
1951	25,268,398	4,413,954	2,214,321	27,468,031	12.4
1952	27,468,031	2,749,288	2,256,765	27,960,554	12.4
1953	27,960,554	3,296,130	2,311,856	28,944,828	12.5
1954	28,944,828	2,873,037	2,257,119	29,560,746	13.1
1955	29,560,746	2,870,724	2,419,300	30,012,170	12.4
1956	30,012,170	2,974,336	2,551,857	30,434,649	11.9
1957	30,434,649	2,424,800	2,559,044	30,300,405	11.8
1958	30,300,405	2,608,242	2,372,730	30,535,917	12.9
1959	30,535,917	3,666,745	2,483,315	31,719,347	12.8
1960	31,719,347	2,365,328	2,471,464	31,613,211	12.8
1961	31,613,211	2,657,567	2,512,273	31,758,505	12.6
1962	31,758,505	2,180,896	2,550,178	31,389,223	12.3
1963	31,389,223	2,174,110	2,593,343	30,969,990	11.9
1964	30,969,990	2,664,767	2,644,247	30,990,510	11.7
1965	30,990,510	3,048,079	2,686,198	31,352,391	11.7
1966	31,352,391	2,963,978	2,864,242	31,452,127	11.0
1967	31,452,127	2,962,122	3,037,579	31,376,670	10.3
1968	31,376,670	2,454,635	3,124,188	30,707,117	9.8
1969	30,707,117	2,120,036	3,195,291	29,631,862	9.3
1970	29,631,862	12,688,918(2)	3,319,445	39,001,335(2)	11.7(2)
1971	39,001,335(2)	2,317,732	3,256,110	38,062,957(2)	11.7(2)
1972	38,062,957(2)	1,557,848	3,281,397	36,339,408(2)	11.1(2)
1973	36,339,408(2)	2,145,831	3,185,400	35,299,839(2)	11.1(2)
1974	35,299,839(2)	1,993,573	3,043,456	34,249,956(2)	11.3(2)

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(1) Production is the amount originally estimated and used by API in prior reserves reports.
(2) Figures include 9.6 billion barrels located in Prudhoe Bay, Alaska (discovered in 1968).

Source: American Petroleum Institute, Committee on Reserves and Productive Capacity.

THE RESERVES OF UNITED STATES CRUDE OIL
(Thousands of barrels)

Year	Proved Reserves at Start of Year	Revisions Extensions and Discoveries, During Year	Production During Year (1)	Proved Reserves at Year-end	Indicated Years Supply of Year-end Proved Reserves
1975	34,249,956(2)	1,318,463	2,886,292	32,682,127(2)	11.3(2)
1976	32,682,127(2)	1,085,291	2,825,252	30,942,166(2)	11.0(2)
1977(3)	33,502,000	1,140,000	2,862,000	31,780,000	11.1
1978	31,780,000	2,583,000	3,008,000	31,355,000	10.4
1979	31,355,000	1,410,000	2,955,000	29,810,000	10.1
1980	29,810,000	2,970,000	2,975,000	29,805,000	10.0
1981	29,805,000	2,570,000	2,949,000	29,426,000	10.0
1982	29,426,000	1,382,000	2,950,000	27,858,000	9.4
1983	27,858,000	2,897,000	3,020,000	27,735,000	9.2
1984	27,735,000	3,748,000	3,037,000	28,446,000	9.4
1985	28,446,000	3,022,000	3,052,000	28,416,000	9.3
1986	28,416,000	1,446,000	2,973,000	26,889,000	9.0
1987	26,889,000	3,240,000	2,873,000	27,256,000	9.5

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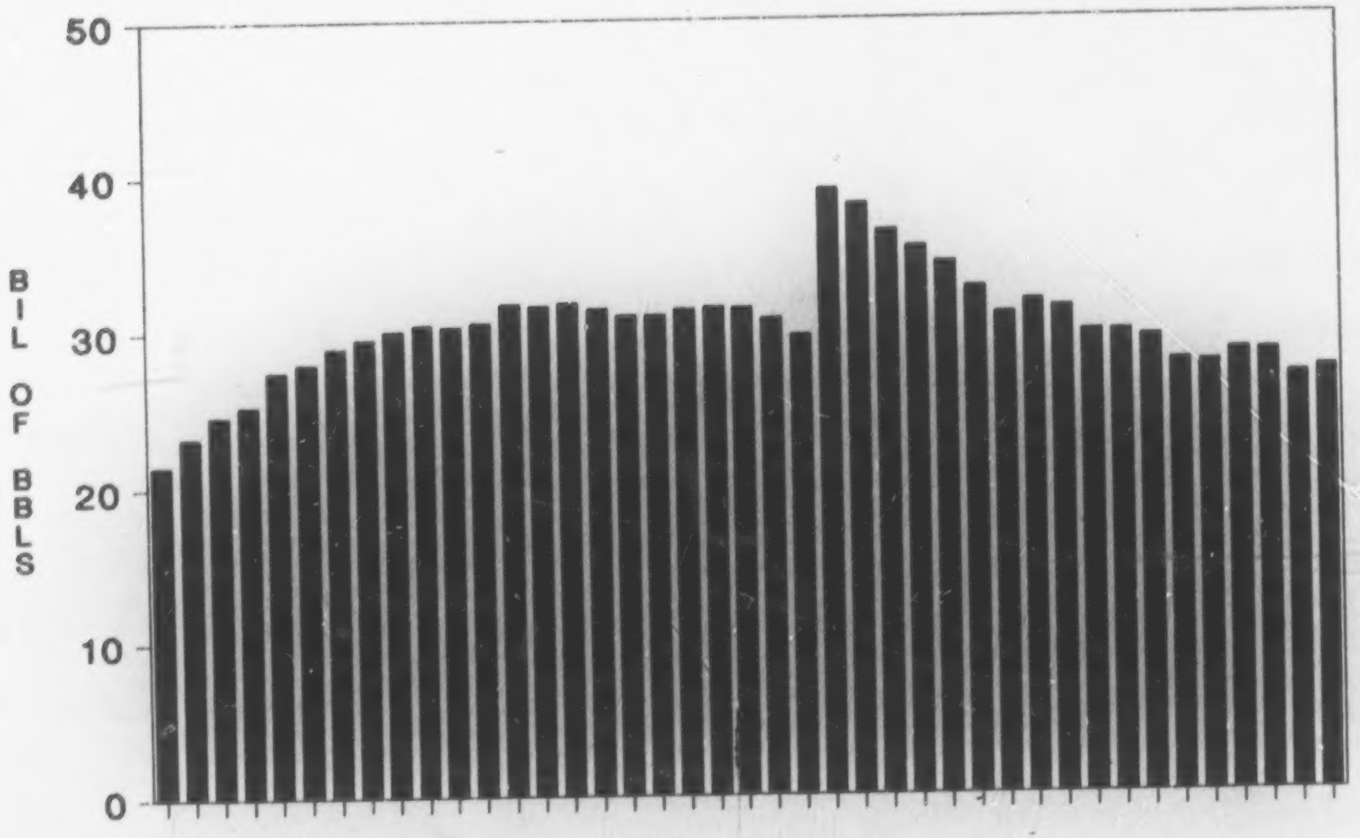
(1) Production is the amount originally estimated and used by API in prior reserves reports (through 1979).
(2) Figures include approximately 10.0 billion barrels located in Prudhoe Bay, Alaska.
(3) Beginning in 1977, crude oil reserves estimates come from the Department of Energy. Therefore, reserves at year-end 1976 do not equal reserves at start of year 1977. These figures include crude oil only, i.e., they exclude lease condensate.

Source: American Petroleum Institute, Committee on Reserves
1977-1987: U.S. Department of Energy, U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves

U.S. CRUDE OIL RESERVES



1947 - 1987

Source: API & Dept. of Energy

Section II
Table 3

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Alabama	2.8	3.5	3.5	5.4	7.9	15.6	17.2	15.6	20.6	37.5	34.4	38.6	34.2
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	296.9	300.0	297.5	341.7	336.5	352.3	358.2	351.4	329.5	317.7	305.0	317.9	312.9
California	3,295.0	3,763.6	3,822.8	3,733.6	3,760.9	3,854.2	3,919.4	3,888.6	3,801.4	3,771.4	3,759.8	3,866.4	3,762.5
Colorado	381.9	365.5	344.8	339.5	325.2	305.7	319.3	328.7	334.0	363.8	309.9	392.1	381.0
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Illinois	355.4	393.4	468.1	564.2	646.3	619.5	624.8	658.4	691.2	700.0	654.7	607.6	594.4
Indiana	46.0	49.1	50.2	57.4	50.7	55.5	62.1	67.2	61.5	67.7	66.7	71.5	74.0
Kansas	562.7	674.4	736.4	732.2	791.9	917.0	913.3	978.4	998.1	992.2	947.5	992.4	917.5
Kentucky	64.6	59.2	56.2	55.9	58.5	55.6	81.7	85.3	107.5	148.4	138.0	126.4	136.3
Louisiana	1,791.0	1,869.3	1,909.8	2,185.1	2,284.8	2,557.5	2,759.7	2,961.7	3,255.3	3,675.4	3,857.6	4,044.0	4,680.1
Michigan	69.7	69.4	66.5	78.7	64.1	57.4	60.7	58.6	58.9	55.3	49.5	45.0	55.3
Mississippi	303.7	365.4	402.9	385.7	385.4	358.8	350.1	412.3	387.7	368.2	359.6	378.7	389.3
Montana	114.7	118.9	112.4	111.3	108.4	156.2	209.0	272.4	298.9	331.4	320.0	337.8	309.3
Nebraska	0.9	0.9	1.6	9.7	15.9	21.8	25.6	38.0	57.7	62.9	63.1	69.2	80.6
New Mexico	530.5	552.2	592.2	592.0	611.6	733.4	814.9	805.9	819.7	835.4	831.7	894.1	1,025.8
New York	71.5	67.1	62.9	58.8	57.1	52.9	49.1	45.8	42.9	40.2	37.5	35.8	34.2
North Dakota	--	--	--	--	5.0	76.2	128.3	134.3	185.5	195.8	258.2	314.1	381.9
Ohio	29.0	28.5	27.7	27.3	26.4	27.4	31.8	36.8	56.0	63.6	68.2	70.8	74.1
Oklahoma	953.0	1,250.4	1,329.9	1,396.9	1,476.5	1,557.6	1,752.2	1,955.3	2,016.0	2,009.8	1,941.5	1,898.1	1,864.7
Pennsylvania	122.7	109.8	103.4	106.4	95.0	121.7	111.1	101.8	93.3	134.7	126.5	119.8	113.6
South Dakota	--	--	--	--	--	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	11,777.5	12,484.2	13,509.7	13,581.6	15,315.0	14,916.2	14,998.6	14,982.0	14,933.5	14,783.4	14,555.1	14,322.2	14,859.7
Utah	(1)	(1)	15.8	21.6	29.7	42.4	37.9	36.4	37.1	61.4	140.0	198.6	194.5
West Virginia	36.1	36.7	38.0	39.0	38.8	37.2	36.6	37.3	47.0	51.2	52.5	52.1	51.3
Wyoming	679.3	715.8	691.6	841.0	973.4	1,064.7	1,279.1	1,303.6	1,373.6	1,363.2	1,419.7	1,408.7	1,402.9
Miscellaneous	3.0	3.0	3.6	3.4	8.1	3.8	4.1	3.8	5.2	4.5	3.6	4.0	9.2
TOTAL U.S.(2)	21,487.7	23,380.4	24,649.5	25,268.4	27,468.0	27,960.6	28,914.8	29,560.7	30,012.2	30,434.6	30,300.4	30,535.9	31,719.3

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annual Reports.

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Alabama	33.3	35.9	37.5	45.1	49.9	66.4	85.3	78.8	72.7	67.1	65.3	61.5	56.7
Alaska	(1)	(1)	(1)	74.9	82.9	159.8	321.4	380.8	373.2	432.3	10,148.8	10,116.2	10,096.3
Arkansas	302.0	280.7	246.8	225.3	205.2	201.0	181.3	176.4	159.3	127.3	129.6	117.6	113.1
California	3,658.5	3,614.7	3,648.4	3,599.7	4,125.5	4,567.5	4,608.0	4,369.4	4,340.7	4,242.7	3,984.0	3,705.8	3,553.7
Colorado	363.9	419.7	388.3	368.4	346.3	327.2	343.5	339.9	420.5	400.6	389.0	332.8	326.4
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	74.8	204.1	208.1
Illinois	555.9	503.2	460.2	416.6	391.5	371.2	362.3	335.5	313.8	272.1	228.7	208.8	174.9
Indiana	66.3	62.0	61.0	63.4	60.6	57.6	47.9	47.2	40.2	41.3	37.0	30.9	29.4
Kansas	883.8	878.0	862.4	841.3	796.5	751.6	726.4	625.1	600.8	566.0	539.3	501.6	453.4
Kentucky	128.9	116.5	108.6	100.5	117.9	107.6	101.2	94.3	79.5	73.1	61.4	52.5	48.2
Louisiana	4,785.4	4,931.2	5,086.6	5,088.6	5,162.5	5,245.8	5,408.4	5,455.9	5,608.2	5,689.2	5,710.3	5,399.0	5,028.5
Michigan	77.8	78.8	75.0	68.5	58.3	52.8	70.7	62.5	55.3	51.5	45.6	58.8	62.0
Mississippi	407.1	401.2	388.4	384.9	356.7	359.8	374.1	356.7	325.6	360.2	354.7	342.4	312.5
Montana	266.7	250.9	248.9	271.3	251.6	274.1	281.6	308.0	345.1	275.8	241.5	228.2	241.2
Nebraska	86.2	100.4	93.8	83.6	71.1	70.7	57.1	63.2	55.3	46.8	40.9	36.1	30.6
New Mexico	1,083.7	1,090.2	1,064.6	1,010.7	956.8	895.2	1,024.6	925.8	864.5	839.9	760.9	656.9	582.6
New York	32.4	27.7	23.1	18.4	13.6	11.9	10.2	14.6	13.0	11.8	10.6	9.8	9.2
North Dakota	430.5	413.1	403.5	389.2	377.2	395.1	321.3	290.3	287.4	234.5	192.4	174.0	166.0
Ohio	74.7	75.8	77.3	87.8	99.6	100.9	101.2	114.2	132.3	127.4	127.9	129.1	127.4
Oklahoma	1,790.5	1,787.5	1,728.3	1,628.1	1,585.9	1,517.5	1,518.2	1,458.9	1,394.7	1,390.0	1,351.4	1,404.6	1,303.0
Pennsylvania	107.6	102.0	96.7	91.7	86.6	76.8	72.4	63.3	59.2	54.7	51.3	47.1	37.3
South Dakota	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	14,758.5	14,849.6	14,648.3	14,573.1	14,299.8	14,303.1	14,077.1	14,494.1	13,809.9	13,063.2	13,195.5	13,023.5	12,144.1
Utah	208.5	218.1	197.7	219.6	219.5	196.9	213.4	201.0	180.0	195.3	181.5	165.8	244.4
West Virginia	51.4	50.9	56.2	57.3	58.7	55.2	56.6	56.2	53.6	53.5	53.2	51.7	34.0
Wyoming	1,427.4	1,380.5	1,297.0	1,254.3	1,204.5	1,168.9	1,072.5	1,043.5	1,101.3	996.6	1,017.4	997.0	949.8
Miscellaneous	32.3	89.7	90.5	82.5	11.9	17.9	15.3	20.9	20.8	18.9	83.2	7.3	6.5
TOTAL U.S.(2)	31,613.2	31,758.5	31,389.2	30,970.0	30,990.5	31,352.4	31,452.1	31,376.7	30,707.1	29,631.9	39,001.3	38,063.0	36,339.4

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annual Reports.

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Alabama	53.6	68.7	61.0	53.3	85.0	74.0	45.0	54.0	55.0	54.0	51.0	68.0	69.0
Alaska	10,112.2	10,094.1	10,037.3	9,785.7	8,413.0	9,384.0	8,875.0	8,751.0	8,283.0	7,406.0	7,307.0	7,563.0	7,056.0
Arkansas	105.6	106.3	95.7	93.4	116.0	111.0	107.0	107.0	113.0	107.0	120.0	114.0	97.0
California	3,488.1	3,557.0	3,647.5	3,589.9	5,005.0	4,974.0	5,265.0	5,470.0	5,441.0	5,405.0	5,348.0	5,707.0	5,801.0
Colorado	304.8	289.3	276.1	251.8	230.0	194.0	159.0	183.0	147.0	169.0	186.0	198.0	198.0
Florida	183.9	302.7	262.5	249.6	213.0	168.0	128.0	134.0	109.0	97.0	78.0	82.0	77.0
Illinois	152.3	159.8	161.0	155.3	150.0	158.0	136.0	113.0	129.0	150.0	135.0	153.0	136.0
Indiana	26.6	24.4	22.0	22.3	20.0	29.0	40.0	23.0	23.0	28.0	34.0	33.0	35.0
Kansas	401.1	395.1	364.4	361.6	349.0	303.0	377.0	310.0	371.0	378.0	344.0	377.0	423.0
Kentucky	40.0	36.6	39.3	38.2	30.0	40.0	25.0	35.0	29.0	36.0	35.0	41.0	42.0
Louisiana	4,576.8	4,226.5	3,827.2	3,470.6	3,600.0	3,448.0	2,780.0	2,751.0	2,985.0	2,728.0	2,707.0	2,661.0	2,642.0
Michigan	72.4	82.3	93.3	138.8	233.0	220.0	159.0	205.0	240.0	184.0	209.0	180.0	191.0
Mississippi	291.0	261.4	231.2	214.2	241.0	250.0	238.0	202.0	209.0	223.0	205.0	201.0	184.0
Montana	219.3	207.4	164.0	152.7	175.0	158.0	152.0	179.0	186.0	216.0	234.0	224.0	232.0
Nebraska	28.2	26.8	28.4	31.3	22.0	30.0	25.0	46.0	41.0	32.0	44.0	46.0	42.0
New Mexico	643.0	625.0	588.1	535.5	605.0	579.0	563.0	547.0	555.0	563.0	576.0	660.0	688.0
New York	8.3	10.9	10.0	9.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Dakota	179.5	172.8	158.2	149.6	155.0	162.0	211.0	214.0	223.0	237.0	258.0	260.0	255.0
Ohio	124.9	123.9	121.3	125.3	74.0	69.0	82.0	116.0	112.0	111.0	130.0	116.0	79.0
Oklahoma	1,271.0	1,232.4	1,239.7	1,186.6	1,109.0	979.0	1,014.0	930.0	950.0	971.0	931.0	940.0	935.0
Pennsylvania	39.6	50.4	48.0	50.6	57.0	27.0	33.0	35.0	32.0	37.0	41.0	40.0	38.0
South Dakota	(1)	(1)	1.9	1.5	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	(1)	(1)	1.5	1.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Texas	11,756.6	11,001.5	10,080.0	9,226.3	9,751.0	8,911.0	8,248.0	8,206.0	8,093.0	7,616.0	7,539.0	7,557.0	7,894.0
Utah	264.5	250.6	208.3	183.2	252.0	188.0	201.0	198.0	190.0	173.0	187.0	172.0	276.0
West Virginia	32.1	32.2	31.4	30.0	21.0	30.0	48.0	30.0	30.0	48.0	49.0	76.0	40.0
Wyoming	916.8	903.4	877.4	827.8	851.0	845.0	841.0	928.0	840.0	856.0	957.0	954.0	951.0
Miscellaneous	7.6	8.5	5.4	6.2	23.0	24.0	22.0	38.0	40.0	33.0	30.0	23.0	35.0
TOTAL U.S.(2)	35,299.8	34,250.0	32,682.1	30,942.2	31,780.0	31,355.0	29,810.0	29,805.0	29,426.0	27,858.0	27,735.0	28,446.0	28,416.0

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.

Sources: 1947-1976: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada, Annuals.
1977-1985: DOE/EIA--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

U.S. PROVED CRUDE OIL RESERVES BY STATE
(In Millions of Barrels)

State	1986	1987
Alabama	55.0	55.0
Alaska	6,875.0	7,378.0
Arkansas	88.0	82.0
California	4,734.0	4,709.0
Colorado	207.0	292.0
Florida	67.0	61.0
Illinois	135.0	153.0
Indiana	32.0	23.0
Kansas	312.0	357.0
Kentucky	31.0	25.0
Louisiana	826.0	807.0
Michigan	146.0	151.0
Mississippi	199.0	202.0
Montana	248.0	246.0
Nebraska	45.0	33.0
New Mexico	644.0	654.0
New York	(1)	(1)
North Dakota	218.0	215.0
Ohio	72.0	66.0
Oklahoma	874.0	788.0
Pennsylvania	26.0	26.0
South Dakota	(1)	(1)
Tennessee	(1)	(1)
Texas	7,152.0	7,112.0
Utah	269.0	284.0
West Virginia	37.0	34.0
Wyoming	849.0	854.0
Miscellaneous	33.0	30.0
TOTAL U.S.(2)	26,889.0(3)	27,256.0(3)

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(1) Included in Miscellaneous.
(2) Totals may not add due to independent rounding.
(3) 1986 includes 2,715 from federal offshore waters, 1987 = 2,639.

Source: D.O.E./E.I.A.--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

ESTIMATED PROVED WORLD RESERVES OF CRUDE OIL
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1975	Nation	1976	Nation	1977
1. Saudi Arabia(1)	164,500,000	1. Saudi Arabia(1)	148,600,000	1. Saudi Arabia(1)	151,400,000
2. U.S.S.R.	83,400,000	2. U.S.S.R.	80,400,000	2. U.S.S.R.	78,100,000
3. Kuwait(1)	72,800,000	3. Kuwait(1)	68,000,000	3. Kuwait(1)	67,400,000
4. Iran	66,000,000	4. Iran	64,500,000	4. Iran	63,000,000
5. Iraq	35,000,000	5. Iraq	34,300,000	5. Iraq	34,000,000
6. United States	34,249,956	6. United States	32,682,127	6. United Arab Emirates	31,200,000
7. United Arab Emirates	33,920,000	7. United Arab Emirates	32,200,000	7. United States	30,942,166
8. Libya	26,600,000	8. Libya	26,100,000	8. Libya	25,500,000
9. People's Republic of China	25,000,000	9. Nigeria	20,200,000	9. People's Republic of China	20,000,000
10. Nigeria	20,900,000	10. People's Republic of China	20,000,000	10. Nigeria	19,500,000
11. United Kingdom	15,700,000	11. Venezuela	17,700,000	11. United Kingdom	16,800,000
12. Venezuela	15,000,000	12. United Kingdom	16,000,000	12. Venezuela	15,270,000
13. Indonesia	15,000,000	13. Indonesia	14,000,000	13. Indonesia	10,500,000
14. Mexico	13,582,000	14. Mexico	9,500,000	14. Mexico	7,000,000
15. Algeria	7,700,000	15. Algeria	7,370,000	15. Algeria	6,800,000
16. Norway	7,300,000	16. Norway	7,000,000	16. Canada	6,257,082
17. Canada	7,171,229	17. Canada	6,653,002	17. Oman	5,800,000
18. Oman	6,000,000	18. Oman	5,900,000	18. Qatar	5,700,000
19. Qatar	6,000,000	19. Qatar	5,850,000	19. Norway	5,660,000
20. Congo Republic	4,874,000	20. Egypt	3,900,000	20. India	3,000,000
TOTAL FREE WORLD	601,018,535	TOTAL FREE WORLD	554,920,849	TOTAL FREE WORLD	538,989,568
TOTAL WORLD	712,418,535	TOTAL WORLD	657,920,849	TOTAL WORLD	640,089,568

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 17.3 billion barrels in 1975, 6.4 billion barrels in 1976, [illegible] 6.3 billion barrels in 1977. This production is not included in the above figures.

Source: United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
Canada, Canadian Petroleum Association
Other Nations, Oil and Gas Journal, Worldwide Report

Section II
Table 4a

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES-TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1978	Nation	1979	Nation	1980
1. Saudi Arabia(1)	150,000,000	1. Saudi Arabia(1)	165,700,000	1. Saudi Arabia(1)	163,350,000
2. U.S.S.R.	75,000,000	2. U.S.S.R.	71,000,000	2. U.S.S.R.	67,000,000
3. Kuwait(1)	67,000,000	3. Kuwait(1)	66,200,000	3. Kuwait(1)	65,400,000
4. Iran	62,000,000	4. Iran	59,000,000	4. Iran	58,000,000
5. Iraq	[illegible],500,000	5. Iraq	32,100,000	5. Mexico	31,250,000
6. United Arab Emirates	32,425,000	6. Abu Dhabi	30,000,000	6. Iraq	31,000,000
7. United States	29,486,402	7. United States	27,803,760	7. Abu Dhabi	28,000,000
8. Libya	25,000,000	8. Libya	24,300,000	8. United States	27,051,289
9. People's Republic of China	20,000,000	9. People's Republic of China	20,000,000	9. Libya	23,500,000
10. United Kingdom	19,000,000	10. Nigeria	18,200,000	10. People's Republic of China	20,000,000
11. Nigeria	18,700,000	11. Venezuela	18,000,000	11. Venezuela	17,870,000
12. Venezuela	18,200,000	12. Mexico	16,000,000	12. Nigeria	17,400,000
13. Mexico	14,000,000	13. United Kingdom	16,000,000	13. United Kingdom	15,400,000
14. Indonesia	10,000,000	14. Indonesia	10,200,000	14. Indonesia	9,600,000
15. Algeria	6,600,000	15. Canada	6,860,000	15. Algeria	8,440,000
16. Norway	6,000,000	16. Algeria	6,300,000	16. Canada	6,800,000
17. Canada	5,970,872	17. Norway	5,900,000	17. Norway	5,750,000
18. Oman	5,650,000	18. Qatar	4,000,000	18. Qatar	3,760,000
19. Qatar	5,600,000	19. Egypt	3,200,000	19. Egypt	3,100,000
20. India	3,000,000	20. India	2,900,000	20. Malaysia	2,800,000
TOTAL FREE WORLD	547,805,194	TOTAL FREE WORLD	547,771,585	TOTAL FREE WORLD	552,174,789
TOTAL WORLD	645,805,194	TOTAL WORLD	641,771,585	TOTAL WORLD	642,174,789

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 6.2 billion barrels in 1978, 6.5 billion barrels in 1979, and 6.3 billion barrels in 1980. These figures are not included in the above figures.

Source: United States, American Petroleum Institute, Committee on Reserves and Productive Capacity
Canada, Canadian Petroleum Association
Other Nations, Oil and Gas Journal, Worldwide Report

Section II
Table 4b

(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

Nation	1981	Nation	1982	Nation	1983
1. Saudi Arabia(1)	165,000,000	1. Saudi Arabia(1)	164,600,000	1. Saudi Arabia(1)	162,400,000
2. Kuwait(1)	64,900,000	3. Kuwait(1)	64,480,000	3. Kuwait(1)	64,230,000
3. U.S.S.R.	63,000,000	2. U.S.S.R.	63,000,000	2. U.S.S.R.	63,000,000
4. Iran	57,500,000	4. Iran	57,000,000	4. Iran	55,308,000
5. Mexico	44,000,000	5. Mexico	56,990,000	5. Mexico	48,300,000
6. Iraq	30,000,000	6. Abu Dhabi	30,600,000	6. Iraq	41,000,000
7. Abu Dhabi	29,000,000	7. United States	29,426,000	7. Abu Dhabi	30,510,000
8. United States	29,805,000	8. Iraq	29,700,000	8. United States	27,858,000
9. Libya	23,000,000	9. Libya	22,600,000	9. Libya	21,500,000
10. China	20,500,000	10. Venezuela	20,300,000	10. Venezuela	21,500,000
11. Venezuela	17,950,000	11. China	19,895,000	11. China	19,485,000
12. Nigeria	16,700,000	12. Nigeria	16,500,000	12. Nigeria	16,750,000
13. United Kingdom	14,800,000	13. United Kingdom	14,800,000	13. United Kingdom	13,900,000
14. Indonesia	9,500,000	14. Indonesia	9,800,000	14. Indonesia	9,550,000
15. Algeria	8,200,000	15. Algeria	8,080,000	15. Algeria	9,440,000
16. Canada	6,400,000	16. Norway	7,620,000	16. Canada	7,020,000
17. Norway	5,500,000	17. Canada	7,300,000	17. Norway	6,800,000
18. Qatar	3,585,000	18. Qatar	3,434,000	18. Qatar	3,425,000
19. Malaysia	3,000,000	19. Egypt	2,930,000	19. Malaysia	3,325,000
20. Egypt(2)	2,900,000	20. Malaysia	2,800,000	20. Egypt	3,325,000
TOTAL FREE WORLD	565,629,712	TOTAL FREE WORLD	585,505,150	TOTAL FREE WORLD	583,147,406
TOTAL WORLD	651,929,712	TOTAL WORLD	670,350,150	TOTAL WORLD	668,262,406

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 6,260 mb in 1981, 6,500 mb in 1982, and 5,840 mb in 1983. This production is not included in the above figures.

Source: United States, U.S. Energy Information Administration
Rest of World, Oil and Gas Journal

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES-TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of barrels)

	Nation	1984		Nation	1985		Nation	1986
1.	Saudi Arabia(1)	166,000,000	1.	Saudi Arabia(1)	169,000,000	1.	Saudi Arabia(1)	168,800,000
2.	Kuwait(1)	63,900,000	2.	Kuwait(1)	90,000,000	2.	Kuwait(1)	89,774,000
3.	U.S.S.R.	63,000,000	3.	U.S.S.R.	63,000,000	3.	U.S.S.R.	61,000,000
4.	Iran	51,000,000	4.	Mexico	48,600,000	4.	Mexico	49,300,000
5.	Mexico	48,000,000	5.	Iran	48,500,000	5.	Iran	47,876,000
6.	Iraq	43,000,000	6.	Iraq	44,500,000	6.	Iraq	44,110,000
7.	Abu Dhabi	30,400,000	7.	Abu Dhabi	30,500,000	7.	Abu Dhabi	31,000,000
8.	United States	27,735,000	8.	United States	28,446,000	8.	United States	28,416,000
9.	Venezuela	24,850,000	9.	Venezuela	25,845,000	9.	Venezuela	25,591,000
10.	Libya	21,270,000	10.	Libya	21,100,000	10.	Libya	21,300,000
11.	China	19,100,000	11.	China	19,100,000	11.	China	18,420,000
12.	Nigeria	16,550,000	12.	Nigeria	16,650,000	12.	Nigeria	16,600,000
13.	United Kingdom	13,150,000	13.	United Kingdom	13,590,000	13.	United Kingdom	13,000,000
14.	Algeria	9,220,000	14.	Algeria	9,000,000	14.	Norway	10,900,000
15.	Indonesia	9,100,000	15.	Indonesia	8,650,000	15.	Algeria	8,820,000
16.	Norway	7,660,000	16.	Norway	8,300,000	16.	Indonesia	8,500,000
17.	Canada	6,730,000	17.	Canada	7,075,000	17.	Canada	6,500,000
18.	India	3,485,000	18.	Oman	3,500,000	18.	Oman	4,000,000
19.	Egypt	3,450,000	19.	India	3,500,000	19.	Egypt	3,850,000
20.	Qatar	3,330,000	20.	Qatar	3,350,000	20.	India	3,736,000
	TOTAL FREE WORLD	585,137,600		TOTAL FREE WORLD	615,713,400		TOTAL FREE WORLD	619,196,560
	TOTAL WORLD	669,737,600		TOTAL WORLD	699,813,400		TOTAL WORLD	700,566,560

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(1) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 5,695 MB in 1984, 5,420 MB in 1985, and 5,380 in 1986. These data are not included in the above figures.

Source: United States--U.S. Energy Information Administration, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual Report
Rest of World--Oil and Gas Journal, "Worldwide Report" issue

Section II
Table 4d

ESTIMATED WORLD PROVEN CRUDE OIL RESERVES--TWENTY LEADING NATIONS
(ANNUALLY AS OF JANUARY 1)
(Thousands of Barrels)

	Nation	1987		Nation	1988		Nation	1989
1.	Saudi Arabia	166,573,900	1.	Saudi Arabia	166,980,000	1.	Saudi Arabia	169,970,000
2.	Kuwait	91,916,000	2.	Iraq	100,000,000	2.	Iraq	100,000,000
3.	U.S.S.R.	59,000,000	3.	Iran	92,850,000	3.	Iran	92,850,000
4.	Mexico	54,653,000	4.	Abu Dhabi	92,205,000	4.	Abu Dhabi	92,205,000
5.	Iran	48,800,000	5.	Kuwait	91,920,000	5.	Kuwait	91,920,000
6.	Iraq	47,100,000	6.	U.S.S.R.	59,000,000	6.	U.S.S.R.	58,500,000
7.	Abu Dhabi	31,000,000	7.	Venezuela	56,300,000	7.	Venezuela	58,083,900
8.	United States	26,889,000	8.	Mexico	48,610,000	8.	Mexico	54,110,000
9.	Venezuela	25,000,000	9.	United States	27,256,000	9.	United States	26,500,000
10.	Libya	21,300,000	10.	Libya	21,000,000	10.	China	23,500,000
11.	China	18,400,000	11.	China	18,400,000	11.	Libya	22,000,000
12.	Nigeria	16,000,000	12.	Nigeria	15,980,000	12.	Nigeria	16,000,000
13.	Norway	10,500,000	13.	Norway	14,800,000	13.	Norway	10,435,000
14.	United Kingdom	9,000,000	14.	Algeria	8,500,000	14.	Algeria	8,400,000
15.	Algeria	8,800,000	15.	Indonesia	8,400,000	15.	Indonesia	8,250,000
16.	Indonesia	8,300,000	16.	Canada	6,825,000	16.	Canada	6,785,514
17.	Canada	6,850,000	17.	United Kingdom	5,200,000	17.	India	6,354,200
18.	India	4,202,000	18.	Egypt	4,300,000	18.	United Kingdom	5,175,000
19.	Oman	4,032,000	19.	India	4,250,000	19.	Egypt	4,300,000
20.	Egypt	3,600,000	20.	Oman	4,012,000	20.	Oman	4,071,160
	TOTAL FREE WORLD	620,528,600		TOTAL FREE WORLD	810,144,500		TOTAL FREE WORLD	823,642,751
	TOTAL WORLD	699,778,600		TOTAL WORLD	889,344,500		TOTAL WORLD	907,442,751

Source: U.S.--D.O.E./E.I.A., U.S. Crude Oil, Natural Gas Liquids and Natural Gas Reserves.
Rest of World--Oil and Gas Journal, "Worldwide Report" issue.

USGS ESTIMATES OF U.S. OIL AND GAS RESOURCES

	CRUDE OIL (billion barrels)							NATURAL GAS (trillion cubic feet)					
	Identified resources			Undiscovered recoverable resources				Identified resources		Undiscovered recoverable resources			
Petroleum Region	Measured reserves	Indicated reserves	Inferred reserves	Low 1F95	High 1F5	Mean	Standard deviation	Measured reserves	Inferred reserves	Low(3) 1F95	High 1F5	Mean	Standard deviation
Onshore													
1. Alaska	8.7	0	5.0	2.5	14.6	6.9	4.3	30.0	4.4	19.8	62.3	36.6	14.0
2. Pacific Coast	3.2	1.6	1.2	2.1	7.9	4.4	2.0	4.2	3.8	8.2	24.9	14.7	5.5
3. Colorado Plateau an Basin and Range	0.3	Negl.	1.0	6.9	25.9	14.2	8.0	11.4	4.5	53.5	142.4	90.1	29.7
4. Rocky Mountains and northern Great Plas	1.1	0.2	2.9	6.0	14.0	9.4	2.6	7.1	5.5	29.6	69.0	45.7	12.6
5. West Texas and eastern New Mexico	5.4	1.3	4.0	2.7	9.4	5.4	2.2	15.9	18.1	22.4	75.2	42.8	17.8
6. Gulf Coast	3.8	0.2	5.3	3.6	12.6	7.1	2.8	45.3	74.3	56.5	249.1	124.4	63.6
7. Mid-continent	1.5	0.2	1.4	2.3	7.7	4.4	1.8	32.0	18.8	22.9	80.8	44.5	18.4
8. Michigan Basin	0.2	Negl.	0.8	0.3	2.7	1.1	0.8	1.1	1.1	1.8	10.9	5.1	3.1
9. Eastern Interior	0.2	Negl.	0.1	0.3	1.9	0.9	0.6	Negl.	0.1	1.2	5.0	2.7	1.3
10. Appalachians	0.2	Negl.	0.1	0.1	1.5	0.6	0.5	6.2	5.9	6.4	45.8	20.1	13.2
11. Atlantic Coast	Negl.	0	0.1	0.1	0.8	0.3	0.3	Negl.	Negl.	Negl.	0.4	0.1	0.3
Entire onshore	24.7	3.6	21.8	41.7	71.0	54.6	10.5	153.3	136.5	322.5	567.9	426.8	78.5
Offshore-Shelf													
1A Alaska2	0.2	0	0.1	3.8	22.0	10.8	6.4	2.0	1.2	28.5	99.0	57.4	23.6
2A Pacific Coast	1.2	0	0.5	0.6	3.0	1.5	0.8	1.9	0.4	0.9	5.2	2.5	1.5
6A Gulf of Mexico	1.7	Negl.	1.0	1.3	7.9	4.0	2.1	34.4	39.5	22.0	79.2	45.3	18.5
11A Atlantic Coast	0	0	0	0	3.9	1.3	1.4	0	0	2.2	17.9	8.2	5.0
Entire shelf	3.1	Negl.	1.5	9.2	30.2	17.6	6.9	38.2	41.0	72.0	166.8	113.4	30.4
Offshore-Slope													
1A Alaska2	0	0	0	0	52.0	1.4	2.3	0	0	0	20.2	7.2	12.3
2A Pacific Coast	0	0	0	0.6	6.0	2.4	2.0	0	0	1.9	10.2	4.4	3.0
6A Gulf of Mexico	No data	0	No data	0.9	5.2	2.5	1.4	No data	No data	11.1	51.8	26.5	13.8
11A Atlantic Coast	0	0	0	0	10.7	4.1	3.6	0	0	5.1	34.5	15.4	9.6
Entire slope	0	0	0	4.2	19.2	10.4	4.9	0	0	28.6	87.1	53.6	21.0
Offshore-combined shelf and slope													
1A Alaska2	0.2	0	0.1	4.6	24.2	12.2	6.8	2.0	1.2	33.3	109.6	64.6	26.6
2A Pacific Coast	1.2	0	0.5	1.7	7.9	3.8	2.2	1.9	0.4	3.7	13.6	6.9	3.3
6A Gulf of Mexico	1.7	Negl.	1.0	3.1	11.1	6.5	2.5	34.4	39.5	41.7	114.2	71.8	23.1
11A Atlantic Coast	0	0	0	1.1	12.9	5.4	3.9	0	0	9.2	42.8	23.7	10.8
Entire slope	3.1	Negl.	1.5	16.9	43.5	28.0	8.5	38.2	41.0	117.4	230.6	167.0	37.0
Combined onshore and offshore													
Entire United States	27.8	3.6	23.4	64.3	105.1	82.6	13.4	191.5	177.5	474.6	739.3	593.8	86.8

(1) F95 denotes the 95th fractile; the probability of more than the amount F95 is 95% F5 is defined similarly.
(2) Includes quantities considered recoverable only if technology permits their ploitation beneath Artic pack ice--a condition not yet met.
(3) Does not include gas in storage.

Source: U.S. Geological Survey, Circular 860

SECTION III. EXPLORATION AND DRILLING

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Section III
Table 1

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1947	275	1,434,351	119	662,513	3,086	12,509,723	3,480	14,606,587	11.3
1948	366	1,791,437	135	899,514	3,795	16,048,313	4,296	18,739,264	11.7
1949	364	1,813,650	142	973,124	3,943	15,372,983	4,449	18,159,757	11.4
1950	462	2,345,714	130	800,276	4,698	18,972,164	5,290	22,118,254	11.2
1951	515	2,784,458	169	1,046,805	5,505	24,116,951	6,189	27,948,214	11.1
1952	556	3,122,962	185	1,310,227	5,957	28,068,745	6,698	32,501,934	11.1
1953	581	3,288,855	193	1,244,946	6,151	29,321,262	6,925	33,855,063	11.2
1954	639	3,577,418	263	1,761,483	6,478	30,149,120	7,380	35,488,021	12.2
1955	659	3,667,073	260	1,664,789	7,186	33,654,112	8,105	38,985,974	11.3
1956	628	3,690,270	240	1,762,688	7,874	36,913,273	8,742	42,366,231	9.9
1957	590	3,403,283	282	2,099,922	7,142	33,600,397	8,014	39,103,602	10.9
1958	518	2,963,220	268	2,077,923	6,164	29,161,083	6,950	34,202,226	11.3
1959	466	2,710,157	306	2,113,934	6,259	30,635,114	7,031	35,459,205	11.0
1960	448	2,614,001	297	2,136,721	6,575	31,130,339	7,320	35,881,061	10.2

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1947	982	4,280,672	396	1,895,491	5,397	20,217,185	6,775	26,393,348	20.3
1948	1,098	4,883,179	365	2,306,271	6,550	25,561,647	8,013	32,751,097	18.3
1949	1,406	5,950,460	424	2,409,230	7,228	26,438,601	9,058	34,798,291	20.2
1950	1,583	6,861,758	431	2,356,021	8,292	30,957,394	10,306	40,175,173	19.5
1951	1,763	8,125,473	454	2,495,592	9,539	38,722,629	11,756	49,343,694	18.9
1952	1,776	8,490,701	559	3,393,813	10,090	43,730,875	12,425	55,615,389	18.8
1953	1,981	9,431,700	699	3,952,118	10,633	47,279,793	13,313	60,663,611	20.1
1954	1,985	9,409,404	726	4,399,196	10,389	45,791,944	13,100	59,600,544	20.7
1955	2,236	10,774,397	874	5,212,258	11,832	53,219,667	14,942	69,206,322	20.8
1956	2,267	11,110,534	822	5,179,111	13,118	58,047,439	16,207	74,337,084	19.1
1957	1,945	9,794,182	865	5,966,961	11,904	53,420,086	14,714	69,181,229	19.1
1958	1,745	8,712,007	822	5,472,151	10,632	47,299,753	13,199	61,483,911	19.4
1959	1,702	8,544,972	912	6,031,180	10,577	48,676,369	13,191	63,252,521	19.8
1960	1,321	6,829,122	868	5,466,439	9,515	43,535,075	11,704	55,830,636	18.7

Source: American Association of Petroleum Geologists.

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1961	429	2,304,472	316	2,373,465	6,164	30,733,007	6,909	35,410,944	10.8
1962	470	2,670,875	317	2,380,930	6,007	29,832,533	6,794	34,884,338	11.6
1963	529	2,629,952	240	1,550,207	5,801	29,371,086	6,570	33,551,245	11.7
1964	440	2,623,873	252	1,933,484	5,931	30,028,416	6,623	34,585,773	10.4
1965	397	2,279,545	234	1,849,272	5,544	27,933,474	6,175	32,062,291	10.2
1966	403	2,437,921	232	1,888,322	5,523	27,052,375	6,158	31,378,618	10.3
1967	371	2,255,638	189	1,496,083	4,700	24,255,198	5,260	28,006,919	10.6
1968	321	2,012,067	127	1,046,358	4,757	27,190,387	5,205	30,248,812	8.6
1969	344	2,237,551	191	1,669,263	5,421	31,511,973	5,956	35,418,787	9.0
1970(1)	292	1,952,666	189	1,607,386	4,348	25,412,904	4,829	28,972,956	10.0
1971	246	1,616,540	229	1,716,792	4,161	24,366,037	4,636	27,699,369	10.2
1972	287	1,861,279	270	2,056,516	4,454	26,780,915	5,011	30,698,710	11.1
1973	299	1,874,576	451	3,111,795	4,346	25,631,606	5,096	30,617,977	14.7
1974	396	2,447,814	466	3,172,478	5,084	29,289,318	5,946	34,909,610	17.0
1975	437	2,918,538	486	3,593,502	5,315	31,198,873	6,234	37,710,913	14.8

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1961	1,157	5,899,555	813	5,249,616	9,022	38,054,853	10,992	49,204,024	17.9
1962	1,211	6,205,402	771	5,187,452	8,815	44,103,834	10,797	55,496,688	18.4
1963	1,314	6,409,095	664	4,229,802	8,686	42,846,565	10,664	53,485,462	18.5
1964	1,219	6,715,355	577	4,203,534	8,951	42,655,665	10,747	53,574,554	16.7
1965	946	5,365,758	515	3,757,004	8,005	45,319,365	9,466	54,442,127	15.4
1966	1,030	5,880,029	578	4,881,198	8,705	44,461,934	10,313	55,223,161	15.6
1967	986	5,677,675	532	3,978,526	7,360	38,182,439	8,878	47,838,640	17.1
1968	954	5,642,235	486	3,740,781	7,439	41,575,022	8,879	50,958,038	16.2
1969	1,084	6,563,032	616	4,984,622	8,001	45,918,308	9,701	57,465,962	17.5
1970(1)	763	4,729,423	478	3,666,020	6,195	35,135,039	7,436	43,530,482	16.7
1971	664	3,785,858	472	3,612,832	5,995	34,563,763	7,131	41,962,453	15.9
1972	690	4,042,124	659	4,872,314	6,202	36,364,835	7,551	45,279,273	17.9
1973	654	4,046,218	1,079	7,074,241	6,038	34,928,875	7,771	46,049,334	22.3
1974	870	5,068,782	1,205	7,741,846	6,894	38,861,593	8,969	51,672,221	23.1
1975	991	5,822,068	1,261	8,468,203	7,207	40,755,363	9,459	55,045,634	23.8

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(1) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed regardless of the time frame in which they were reported to API.

Source: 1961-1966 -- American Association of Petroleum Geologists.
1967-1975 -- American Petroleum Institute.

U.S. EXPLORATORY WELLS AND FOOTAGE

New-Field Wildcat Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1976	458	3,013,230	527	3,786,300	4,871	28,898,393	5,856	35,697,923	16.8
1977	458	2,839,680	534	3,868,753	5,170	30,636,898	6,162	37,345,331	16.1
1978	484	3,164,038	644	4,297,038	5,603	34,550,903	6,731	42,011,979	16.8
1979	532	3,468,220	688	4,947,501	5,203	31,941,489	6,423	40,357,210	19.0
1980	664	4,310,733	695	4,764,991	5,973	36,802,580	7,332	45,878,304	18.5
1981	868	6,030,600	720	5,593,603	7,563	47,904,317	9,151	59,528,520	17.4
1982	707	4,613,633	618	4,575,677	6,061	37,840,415	7,386	47,029,725	17.9
1983	508	3,169,330	486	3,101,355	5,063	29,167,196	6,057	35,437,881	16.4
1984	554	3,806,830	429	2,877,818	5,545	34,525,367	6,528	41,210,015	15.1
1985	414	2,890,672	358	2,618,903	4,858	31,087,959	5,630	36,597,534	13.7
1986	270	1,751,349	218	1,446,276	2,996	18,551,934	3,484	21,749,559	14.0
1987	277	1,758,190	218	1,414,726	2,930	17,018,112	3,425	120,191,028	14.5
1988	218	1,386,419	175	1,174,660	2,570	16,309,006	2,963	18,870,085	13.3

Total Exploratory

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage	Success Ratio
1976	1,100	6,493,760	1,361	9,187,178	6,856	38,211,252	9,317	53,892,190	26.4
1977	1,181	6,870,706	1,557	10,204,224	7,402	41,136,466	10,140	58,211,396	27.0
1978	1,189	7,098,457	1,786	11,780,690	8,055	46,616,063	11,030	65,495,210	27.0
1979	1,335	7,991,579	1,921	12,634,380	7,479	42,736,704	10,735	63,362,663	30.3
1980	1,777	10,109,549	2,085	13,710,438	9,008	49,992,439	12,870	73,812,426	30.0
1981	2,661	15,418,060	2,522	16,996,454	12,247	68,653,990	17,430	101,068,504	29.7
1982(1)	2,481	13,415,348	2,172	14,713,785	11,229	60,301,560	15,882	88,430,693	29.3
1983	2,129	10,544,047	1,654	10,235,772	10,062	48,472,448	13,845	69,252,267	27.3
1984	2,334	12,621,000	1,588	9,943,000	11,216	58,759,000	15,138	81,323,000	25.9
1985	1,724	10,068,000	1,283	8,694,000	9,201	49,571,000	12,208	68,333,000	24.6
1986	993	5,990,000	749	5,082,000	5,414	29,973,000	7,156	41,045,000	24.3
1987	895	5,320,000	692	4,582,000	5,128	27,447,000	6,715	37,349,000	23.6
1988	824	5,001,000	646	4,359,000	4,670	27,137,000	6,140	36,497,000	23.9

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(1) Data beginning with 1982 are for estimated completions rather than reported completions. Therefore, these figures do not correspond to those on Table 15d (state data), which represent reported completions.

Source: 1976-1981, API, Well Completions and Footage Drilled in the United States, 1970-1982.
1982-present, API, Quarterly Completions Reports.

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells(1)

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total	Footage
1947	17,017		2,909		4,141		24,067	87,667,652
1948	21,487		2,532		5,476		29,495	104,640,903
1949	20,636		2,463		5,499		28,598	103,204,709
1950	22,847		2,412		6,465		31,724	119,112,827
1951	21,690		2,576		7,114		31,380	122,987,306
1952	21,690		2,696		7,528		31,914	131,574,611
1953	23,781		3,107		7,816		34,704	138,175,389
1954	27,788		3,251		8,779		39,818	159,385,456
1955	29,331		2,739		8,910		40,980	157,063,678
1956	28,463		3,721		8,720		40,904	161,564,916
1957	26,067		3,755		9,079		38,901	152,719,310
1958	22,833		3,981		8,411		35,225	136,740,181
1959	24,098		4,117		8,688		36,903	145,978,895
1960	19,865		4,390		8,059		32,314	134,872,036

Total Wells

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total Wells	Footage	Service Strat & Core	Grand Total
1947	17,999		3,305		9,538		30,842	114,061,000	2,280	33,122
1948	22,585		2,897		12,026		37,508	137,392,000	2,270	39,778
1949	22,042		2,887		12,727		37,656	138,003,000	1,382	39,038
1950	24,430		2,843		14,757		42,030	159,288,000	1,249	43,279
1951	23,453		3,030		16,653		43,136	172,331,000	1,380	44,516
1952	23,466		3,255		17,618		44,339	187,190,000	1,482	45,821
1953	25,762		3,806		18,449		48,017	198,839,000	1,262	49,279
1954	29,773		3,974		19,168		52,915	218,986,000	1,012	53,927
1955	31,567		3,608		20,742		55,917	226,270,000	760	56,677
1956	30,737		4,543		21,797		57,077	233,902,000	1,049	58,126
1957	28,012		4,620		20,976		53,608	221,900,539	1,061	53,838
1958	24,578		4,803		19,043		48,424	198,224,092	1,615	50,039
1959	25,800		5,029		19,265		50,094	209,231,416	1,670	51,764
1960	21,186		5,258		17,574		44,018	190,702,672	2,733	46,751

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(1) The number of development wells was obtained by deducting the total number of exploratory wells reported by the AAPG from the total number of wells reported by the Oil and Gas Journal.
(2) Footage not available prior to 1966.

Source: American Association of Petroleum Geologists and Oil and Gas Journal.

Section III
Table 2a

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells(1)

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total	Footage
1961	19,944		4,851		8,084		32,879	142,912,090
1962	20,038		5,077		7,867		32,982	143,061,953
1963	18,974		4,087		7,661		30,722	130,871,538
1964	19,401		4,278		8,537		32,216	136,347,316
1965	17,815		4,209		8,020		30,044	126,984,888
1966	15,417	59,562,661	3,589	19,562,196	7,065	28,097,191	26,071	107,222,048
1967	14,343	52,955,743	3,127	17,601,654	5,886	22,960,426	23,356	93,517,823
1968	13,377	53,874,620	2,970	16,975,492	5,373	23,162,297	21,720	94,012,409
1969	13,284	55,018,970	3,467	19,177,390	5,735	25,445,537	22,486	99,641,897
1970(3)	12,280	52,101,320	3,353	19,950,845	4,904	22,976,880	20,737	95,029,045
1971	11,239	45,271,862	3,511	19,807,020	4,387	20,214,617	19,137	85,293,499
1972	10,747	45,441,840	4,825	25,384,401	4,811	22,691,048	20,383	93,517,289
1973	9,597	40,712,974	5,896	31,137,367	4,428	21,525,063	19,921	93,375,404
1974	12,794	47,001,530	5,963	30,739,691	5,311	24,362,957	24,068	102,104,178
1975	15,988	61,103,799	6,908	36,012,511	6,529	28,878,049	29,425	125,994,359

Total Wells

	Oil Wells	Footage(2)	Gas Wells	Footage(2)	Dry Holes	Footage(2)	Total Wells	Footage	Service Strat & Core	Grand Total
1961	21,101		5,664		17,106		43,871	192,116,114	3,091	46,962
1962	21,249		5,848		16,682		43,779	198,558,641	2,400	46,179
1963	20,288		4,751		16,347		41,386	184,357,000	2,267	43,653
1964	20,620		4,855		17,488		42,963	189,921,870	2,273	45,236
1965	18,761		4,724		16,025		39,501	181,427,015	1,922	41,423
1966	16,447	65,442,690	4,167	24,443,394	15,770	72,559,125	36,384	162,445,209	2,152	38,536
1967	15,329	58,633,418	3,659	21,580,180	13,246	61,142,865	32,234	141,356,463	1,584	33,818
1968	14,331	59,516,855	3,456	20,716,273	12,812	64,737,319	30,599	144,970,447	2,315	32,914
1969	14,368	61,582,002	4,083	24,162,012	13,736	71,363,845	32,187	157,107,859	1,866	34,053
1970(3)	13,043	56,830,743	4,031	23,616,865	11,099	58,111,919	28,173	138,559,527	1,369	29,542
1971	11,903	49,057,720	3,983	23,419,852	10,382	54,778,380	26,268	127,255,952	1,594	27,682
1972	11,437	49,483,964	5,484	30,256,715	11,013	59,055,883	27,934	138,796,562	1,486	29,420
1973	10,251	44,751,192	6,975	38,211,608	10,466	56,453,938	27,692	139,424,738	970	28,662
1974	13,664	52,070,312	7,168	38,481,537	12,205	63,224,550	33,037	153,776,399	1,378	34,415
1975	16,979	66,925,867	8,169	44,480,714	13,736	69,633,412	38,884	181,039,993	1,920	40,804

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(1) The number of development wells for 1961-1965 was obtained by deducting the total number of exploratory wells reported by the AAPG from the total number of wells reported by the Oil and Gas Journal.

(2) Footage not available prior to 1966.

(3) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed regardless of the time frame in which they were reported to API.

Source: 1961-1965 -- American Association of Petroleum Geologists and Oil and Gas Journal.
1966-1975 -- American Petroleum Institute.

Section III
Table 2b

U.S. DEVELOPMENT AND TOTAL WELLS AND FOOTAGE

Development Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total	Footage
1976	16,597	62,333,936	8,077	40,010,511	6,949	31,052,949	31,623	133,397,396
1977	17,519	68,320,374	10,562	53,295,651	7,634	35,868,457	35,715	157,484,482
1978	17,876	69,522,882	12,619	63,809,274	8,536	39,558,882	39,031	172,891,038
1979	19,354	74,150,995	13,245	67,240,506	8,556	38,931,266	41,155	180,322,767
1980	30,343	113,154,164	15,047	76,641,633	11,226	47,836,614	56,616	237,632,411
1981	39,859	153,287,896	17,220	88,782,627	14,725	63,381,426	71,804	305,451,949
1982	36,771	134,817,629	16,638	90,474,536	14,598	61,660,061	68,007	286,952,226
1983	35,267	125,726,889	12,851	66,429,973	13,775	55,208,335	61,893	247,365,197
1984	42,138	155,025,000	13,374	71,706,000	14,333	60,742,000	69,845	287,473,000
1985	34,734	132,253,000	11,634	62,200,000	12,230	53,992,000	58,598	248,445,000
1986	17,605	68,614,000	7,306	37,776,000	6,948	30,206,000	31,859	136,596,000
1987	15,445	60,449,000	7,101	36,627,000	5,971	27,105,000	28,517	124,181,000
1988	12,233	50,734,000	7,591	38,430,000	5,204	25,336,000	25,028	114.500,000

Total Wells

	Oil Wells	Footage	Gas Wells	Footage	Dry Holes	Footage	Total Wells	Footage	Service Strat & Core	Grand Total
1976	17,697	68,827,696	9,438	49,197,689	13,805	69,264,201	40,940	187,289,586	1,674	42,614
1977	18,700	75,191,080	12,119	63,499,875	15,036	77,004,923	45,855	215,695,878	1,453	47,308
1978	19,065	76,621,339	14,405	75,589,964	16,591	86,174,945	50,061	238,386,248	1,610	51,671
1979	20,689	82,142,574	15,166	79,874,886	16,035	81,667,970	51,890	243,685,430	1,472	53,362
1980	32,120	123,263,713	17,132	90,352,071	20,234	97,829,053	69,486	311,444,837	2,076	71,562
1981	42,520	168,705,956	19,742	105,779,081	26,972	132,035,416	89,234	406,520,453	2,366	91,600
1982(1)	39,252	148,232,977	18,810	105,188,321	25,827	121,961,621	83,889	375,382,919	2,212	86,101
1983	37,396	136,270,936	14,505	76,665,745	23,837	103,680,783	75,738	316,617,464	1,984	77,722
1984	44,472	167,646,000	14,962	81,649,000	25,549	119,501,000	84,983	368,796,000	2,190	87,173
1985	36,458	142,321,000	12,917	70,894,000	21,431	103,563,000	70,806	316,778,000	1,680	72,486
1986	18,598	74,604,000	8,055	42,858,000	12,362	60,179,000	39,015	177,641,000	769	39,784
1987	16,340	65,769,000	7,793	41,209,000	11,099	54,552,000	35,232	161,530,000	795	36,027
1988	13,057	55,735,000	8,237	42,789,000	9,874	52,473,000	31,168	150,997,000	688	31,856

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(1) Data beginning with 1982 are for estimated completions rather than reported completions. Therefore, these figures do not correspond to those on Table 15d (state data), which represent reported completions.

Source: 1976-1981, API, Well Completions and Footage Drilled in the United States, 1970-1982.
1982-present, API, Quarterly Completion Reports.

Section III
Table 3

U.S. WELLS DRILLED BY DEPTH INTERVAL

Year	Depth Interval (Feet) Under 5,000	5,000-9,999	10,000-14,999	15,000-19,999	20,000-over	Total Wells Drilled
1959	34,867	11,719	2,757	220	(1)	49,563
1960	30,575	10,485	2,835	238	(1)	44,133
1961	30,289	10,658	2,789	252	(1)	43,988
1962	29,496	11,103	3,062	283	(1)	43,944
1963	28,524	10,342	2,723	264	(1)	41,853
1964	29,913	10,649	2,604	320	(1)	43,486
1965	25,697	11,081	2,491	327	(1)	39,596
1966	22,178	9,703	2,251	355	34	34,521
1967	20,359	8,668	2,130	343	38	31,538
1968	17,999	8,958	2,264	308	47	29,576
1969	17,067	9,690	2,378	300	46	29,481
1970	16,941	8,644	2,142	361	85	28,173
1971	15,909	7,947	2,005	338	69	26,268
1972	16,736	8,441	2,226	470	61	27,934
1973	16,272	8,848	2,105	389	78	27,692
1974	20,822	9,617	2,178	339	81	33,037
1975	24,632	11,299	2,504	387	62	38,884
1976	26,257	11,592	2,707	330	54	40,940
1977	28,923	13,350	3,121	402	59	45,855
1978	31,717	14,103	3,610	569	62	50,061
1979	33,253	14,121	3,824	606	86	51,890
1980	46,320	18,083	4,270	716	77	69,486
1981	58,780	23,884	5,578	894	98	89,234
1982	55,190	20,457	5,586	1,147	137	82,517
1983	50,247	17,813	4,227	692	69	73,048
1984	55,100	22,072	5,127	661	46	83,006
1985	45,197	18,877	4,686	625	43	69,428
1986	24,348	10,669	2,813	381	30	38,241
1987	20,730	10,113	2,334	293	4	33,474
1988	13,891	8,166	2,123	310	8	24,498

Source: 1959-1969, API, Joint Association Survey.
1970-1981, API, Well Completions and Footage Drilled in the United States, 1970-1982.
1982-present, API, Quarterly Completion Reports.

Section III
Table 4

U.S. PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

	SEISMIC			GRAVITY-MAGNETIC-OTHER			ALL METHODS		
Year	Company	Contractor	Total	Company	Contractor	Total	Company	Contractor	Total
1951	(1)	(1)	6,537	(1)	(1)	802	(1)	(1)	7,339
1952	(1)	(1)	7,958	(1)	(1)	965	(1)	(1)	8,923
1953	(1)	(1)	7,666	(1)	(1)	1,006	(1)	(1)	8,672
1954	(1)	(1)	6,863	(1)	(1)	1,106	(1)	(1)	7,969
1955	2,791	4,299	7,090	419	655	1,150(2)	3,210	4,954	8,240(2)
1956	2,948	3,865	6,813	381	663	1,044	3,329	4,528	7,857
1957	2,834	3,449	6,283	442	517	959	3,276	3,966	7,242
1958	2,334	2,730	5,064	340	327	667	2,674	3,057	5,731
1959	2,289	2,308	5,097	278	321	599	2,567	3,129	5,696
1960	1,979	2,646	4.625	258	324	582	2,237	2,970	5,207
1961	1,747	2,810	4,557	163	304	467	1,910	3,114	5,024
1962	1,322	2,593	3,915	112	204	316	1,434	2,797	4,231
1963	1,618	2,348	3,966	75	133	208	1,693	2,481	4,174
1964	1,360	2,742	4,102	76	228	309(4)	1,436	2,970	4,411(4)
1965	1,635	2,612	4,247	59	165	224	1,694	2,777	4,471
1966	1,496	2,176	3,672	57	88	163(5)	1,553	2,264	3,835(5)
1967	1,255	2,082	3,337	59	100	159	1,314	2,182	3,496
1968	1,138	2,130	3,268	15	104	122(6)	1,153	2,234	3,390(6)
1969	1,048	2,108	3,156	24	292	316	1,072	2,400	3,472
1970	781	1,559	2,340	12	169	181	793	1,728	2,521
1971	656	1,999	2,655	10	97	107	666	2,096	2,762
1972	622	2,394	3,016	6	118	124	628	2,512	3,140
1973	607	2,392	2,999	18	56	74	625	2,448	3,073
1974	540	3,122	3,662	(1)	(1)	230	(1)	(1)	3,892

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(1) Company-contractor data are not available.
(2) Includes 76 magnetometer crew months not allocated to either company or contractor.
(3) Percentages do not equal 100 percent due to unallocated crew months included in total.
(4) Includes 5 other crew months not allocated to either company or contractor.
(5) Includes 18 magnetometer crew months not allocated to either company or contractor.
(6) Includes 3 magnetometer crew months not allocated to either company or contractor.

Source: Society of Exploration Geophysicists, Annual Reports.

U.S. PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

	SEISMIC			GRAVITY-MAGNETIC-OTHER			ALL METHODS		
Year	Company	Contractor	Total	Company	Contractor	Total	Company	Contractor	Total
1975	543	2,860	3,416(2)	(1)	(1)	271	(1)	(1)	3,687
1976	484	2,646	3,140(2)	(1)	(1)	245	(1)	(1)	3,385
1977	499	2,564	3,063(2)	(1)	(1)	120	(1)	(1)	3,183
1978	478	3,670	4,148(2)	(1)	(1)	196	(1)	(1)	4,344
1979	829	3,571	4,400(2)	(1)	(1)	199	(1)	(1)	4,599
1980	1,292	3,669	4,962	(1)	(1)	311	(1)	(1)	5,273
1981	1,038	4,839	5,877	(1)	(1)	382	(1)	(1)	6,259
1982	653	5,023	5,676	(1)	(1)	492	(1)	(1)	6,168
1983	588	4,356	4,944	(1)	(1)	334	(1)	(1)	5,278
1984	737	3,918	4,655	(1)	(1)	217	(1)	(1)	4,872
1985	470	3,024	3,494	(1)	(1)	279	(1)	(1)	3,773
1986	401	1,615	2,016	(1)	(1)	84	(1)	(1)	2,100
1987	283	1,278	1,561	(1)	(1)	258	(1)	(1)	1,819

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(1) Company-contractor data are not available.
(2) Total includes government and university activity unallocated to company-contractor totals.

Source: Society of Exploration Geophysicists, Annual Reports.

FREE WORLD PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

Year	United States	Canada	Latin America	Total Western Hemisphere	Western Europe	Africa	Middle East	Asia	Total Free World
1954	7,969	1,652	1,210	10,831	(1)	(1)	(1)	(1)	12,424
1955	8,240	1,599	1,148	10,987	(1)	(1)	(1)	(1)	13,430
1956	7,857	1,512	1,206	10,575	1,329	797	475	451	13,627
1957	7,242	1,389	1,328	9,959	1,778	892	428	598	13,655
1958	5,731	1,130	1,687	8,548	1,749	1,167	589	537	12,590
1959	5,696	841	1,478	8,015	1,225	1,152	492	597	11,481
1960	5,207	686	1,180	7,073	1,118	1,437	334	564	10,526
1961	5,024	664	995	6,683	1,314	1,472	213	521	10,203
1962	4,231	692	1,107	6,030	1,136	1,130	177	726	9,199
1963	4,174	745	1,153	6,072	1,094	978	233	968	9,345
1964	4,411	673	1,133	6,217	1,035	766	283	909	9,210
1965	4,471	801	1,127	6,399	1,039	721	350	1,180	9,689
1966	3,835	1,039	1,012	5,886	890	925	296	1,043	9,040
1967	3,496	1,155	1,078	5,729	1,057	1,082	266	921	9,055
1968	3,390	970	1,012	5,372	711	679	296	708	7,766
1969	3,472	960	898	5,330	676	864	460	935	8,265
1970	2,521	806	1,052	4,379	725	802	286	1,009	7,201
1971	2,762	334	1,105	4,201	738	915	254	1,578	7,686
1972	3,140	503	1,146	4,789	692	938	239	957	7,615
1973	3,073	585	1,236	4,894	627	798	294	950	7,563
1974	3,892	487	1,572	5,951	702	835	389	1,008	8,897(2)
1975	3,687	597(3)	790(3)	5,074	679(3)	676(3)	306(3)	440(3)	7,185(2)
1976	3,385	421(3)	559(3)	4,365	592(3)	674(3)	351(3)	338(3)	6,353(2)
1977	3,183	766	480(4)	4,429	646	806	309	254	6,497(2)
1978	4,148	782	980	5,910	535	613	330	280	7,668(2)
1979	4,400	761	485	5,646	647	674	345	372	7,746(2)

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(1) Area total not available.
(2) Includes crew months allocated to international waters and other areas not specifically identified, 1974-12, 1975-10, 1976-33, 1977-53, 1978-100, 1979-62.
(3) Seismic activity only.
(4) Only partial data for Mexico included.

Source: Society of Exploration Geophysicists, Annual Reports

FREE WORLD PETROLEUM GEOPHYSICAL EXPLORATION
(Crew Months)

Year	United States	Canada	Latin America	Total Western Hemisphere	Western Europe	Africa	Middle East	Asia	Total Free World
1980	4,962	695	645	6,302	569	688	346	520	8,565(2)
1981	5,877	584	1,261	7,722	733	973	452	436	10,706(2)
1982	5,676	527	808	7,011	798	755	480	752	9,821(2)
1983	4,944	658	703	6,305	744	660	359	700	8,789(2)
1984	4,655	616	678	5,949	770	658	351	703	8,465(2)
1985	3,494	899	751	5,144	756	581	347	560	7,388(2)
1986	2,016	453	676	3,145	703	558	295	636	5,337(2)
1987	1,561	382	586	2,519	435	346	295	522	4,142(2)

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(2) Includes crew months allocated to international waters and other areas not specifically identified.

Source: Society of Exploration Geophysicists, Annual Reports

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD OIL DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A (SIGNIFICANT)	B (SIGNIFICANT)	C (SIGNIFICANT)	D (SIGNIFICANT)	E	F	Total(1)			
1947	3	7	11	52	129	48	250	73	3,325	2.20
1948	2	2	9	59	241	33	345	72	4,087	1.76
1949	9	4	9	65	172	78	337	87	4,238	2.05
1950	3	10	15	69	283	56	436	97	5,149	1.88
1951	1	1	13	71	345	61	492	86	6,044	1.42
1952	2	2	11	70	361	90	536	85	6,440	1.32
1953	1	6	17	88	283	134	529	112	6,634	1.69
1954	2	3	12	82	308	179	586	99	7,033	1.41
1955	2	5	13	95	329	178	622	115	7,743	1.49
1956	0	2	2	92	333	124	553	96	8,436	1.14
1957	1	1	7	63	339	186	597	72	7,556	0.95
1958	3	2	16	82	229	157	489	103	6,618	1.56
1959	0	4	3	52	255	110	424	59	7,031	0.84
1960	1	3	5	35	283	143	470	44	7,320	0.60
1961	0	1	4	47	246	68	366	52	6,909	0.75
1962	0	1	3	44	264	78	390	48	6,794	0.71
1963	2	1	7	41	341	100	492	51	6,570	0.78
1964	0	3	9	48	248	109	417	60	6,623	0.91
1965	2	3	5	35	268	63	376	45	6,175	0.73
1966	3	1	3	40	336	6	389	47	6,158	0.76
1967	1	4	2	39	278	24	348	46	5,271	0.87
1968	3	5	1	38	210	63	320	47	5,205	0.90
1969	2	3	2	41	245	28	321	48	5,956	0.81
TOTAL	43	74	179	1,348	6,326	2,116	10,086	1,644	143,315	1.15

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), P. 2043.

A Fields.......................Over 50 million barrels
B Fields........................25-50 million barrels
C Fields........................10-25 million barrels
D Fields..........................1-10 million barrels
E Fields..................Less than 1 million barrels
F Fields..................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 6a

HISTORICAL RECORD:
NUMBER OF U.S. NEW FIELD OIL DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History: A	B	C	D	E	F	Total(1)	Total(1) Significant Size Oil Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	(SIGNIFICANT)									
Cumulative total 1947-1969	43	74	179	1,348	6,326	2,116	10,086	1,644	143,315	1.15
1970	7	0	5	36	199	17	264	48	4,467	1.07
1971	0	1	3	28	184	13	229	32	4,402	0.73
1972	0	1	1	42	234	12	290	44	5,079	0.87
1973	0	2	4	26	251	7	290	32	4,981	0.64
1974	0	1	0	40	296	7	344	41	5,646	0.73
1975	0	2	3	37	373	8	423	42	6,096	0.69
1976	1	1	5	38	375	20	440	45	5,828	0.77
1977	0	3	2	26	398	14	443	31	6,092	0.51
1978	0	1	0	26	392	11	430	27	6,497	0.42
1979	0	0	2	24	437	19	482	26	6,406	0.41
1980	0	0	1	32	579	34	646	33	7,023	0.47
1981	0	0	1	37	602	48	688	38	8,037	0.47
TOTAL	51	86	206	1,740	10,646	2,326	15,055	2,083	213,869	0.97

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2043.

A Fields.......................Over 50 million barrels
B Fields.........................25-50 million barrels
C Fields.........................10-25 million barrels
D Fields..........................1-10 million barrels
E Fields..................Less than 1 million barrels
F Fields..................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 7

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
1947	5	5	4	30	35	19	98	44	3,325	1.32
1948	3	3	7	33	35	19	100	46	4,087	1.13
1949	8	7	8	34	43	12	112	57	4,238	1.34
1950	4	4	8	28	44	19	107	44	5,149	0.85
1951	10	4	10	41	57	16	138	65	6,044	1.08
1952	10	7	7	44	65	15	148	68	6,440	1.06
1953	3	3	6	40	89	18	159	52	6,634	0.78
1954	4	1	12	51	104	39	211	68	7,033	0.97
1955	2	3	11	33	107	43	199	49	7,743	0.63
1956	2	4	5	52	92	26	181	63	8,436	0.75
1957	9	5	15	70	105	30	234	99	7,556	1.31
1958	3	6	9	55	143	25	241	73	6,618	1.10
1959	4	1	6	51	135	28	225	62	7,031	0.88
1960	6	2	9	63	135	22	237	80	7,320	1.09
1961	4	3	4	35	156	40	242	46	6,909	0.67
1962	3	4	11	61	161	52	292	79	6,794	1.16
1963	4	1	7	38	124	41	215	50	6,570	0.76
1964	4	1	11	37	136	37	226	53	6,623	0.80
1965	1	3	10	38	142	30	224	52	6,175	0.84
1966	1	3	7	36	142	12	201	47	6,158	0.76
1967	4	5	6	26	111	12	164	41	5,271	0.78
1968	1	5	7	27	83	14	137	40	5,205	0.77
1969	3	2	4	35	116	14	174	44	5,956	0.74
TOTAL	98	82	184	958	2,360	583	4,265	1,322	143,315	0.92

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(1) Differs from year-of-discovery total because of consolidations. The reserve estimates for the years 1952 and prior were not specifically based upon six years of development history. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2042.

A Fields.......................Over 300 billion cubic feet
B Fields.......................150-300 billion cubic feet
C Fields.......................60-150 billion cubic feet
D Fields.........................6-60 billion cubic feet
E Fields...........................6 billion cubic feet
F Fields.......................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled(2)	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)									
Cumulative total 1947-1969	98	82	184	958	2,360	583	4,265	1,322	143,315	0.92
1970	4	3	4	25	110	14	160	36	4,467	0.81
1971	1	2	5	45	135	13	201	53	4,402	1.20
1972	3	4	6	52	214	2	281	65	5,079	1.28
1973	1	5	10	59	325	23	423	75	4,981	1.51
1974	1	3	5	61	352	11	433	70	5,646	1.24
1975	2	1	4	69	354	5	435	76	6,096	1.25
1976	2	1	7	63	434	11	518	73	5,828	1.25
1977	1	1	2	56	399	11	470	60	6,092	0.98
1978	1	2	5	58	434	10	510	66	6,497	1.02
1979	0	2	5	29	629	10	675	36	6,406	0.56
1980	0	1	6	47	628	15	697	54	7,023	0.77
1981	1	2	3	55	560	19	640	61	8,037	0.76
TOTAL	115	109	246	1,577	6,934	727	9,708	2,047	213,869	0.96

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(1) Differs from year-of-discovery total because of consolidations. Data for years 1947-52 are from Lahee's Table IV: American Association of Petroleum Geologists Bulletin, Vol. 42, No. 9 (Sept. 1958), p. 2042.

A Fields.......................Over 300 billion cubic feet
B Fields.......................150-300 billion cubic feet
C Fields.........................60-150 billion cubic feet
D Fields...........................6-60 billion cubic feet
E Fields.............................6 billion cubic feet
F Fields.......................Abandoned as non-profitable

(2) Includes oil wells, gas wells and dry holes.

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 8

HISTORICAL RECORD:
NUMBER OF U.S. NEW FIELD OIL AND GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History: A (SIGNIFICANT)	B (SIGNIFICANT)	C (SIGNIFICANT)	D	E	F	Total(1)	Total(1) Significant Size Oil & Gas Fields A-D INCLUSIVE (A+B+C+D)	Total New-Field Wildcats Drilled	Percent of A-D Fields in Total New-Field Wildcats Drilled
1947	8	12	15	82	164	67	348	117	3,325	3.52
1948	5	5	16	92	276	52	446	118	4,087	2.89
1949	17	11	17	99	215	90	449	144	4,238	3.40
1950	7	14	23	97	327	75	543	141	5,149	2.74
1951	11	5	23	112	402	77	630	151	6,044	2.50
1952	12	9	18	114	426	105	684	153	6,440	2.38
1953	4	9	23	128	372	152	688	164	6,634	2.47
1954	6	4	24	133	412	218	797	167	7,033	2.37
1955	4	8	24	128	436	221	821	164	7,743	2.12
1956	2	6	7	144	425	150	734	159	8,436	1.88
1957	10	6	22	133	444	216	831	171	7,556	2.26
1958	6	8	25	137	372	182	730	176	6,618	2.66
1959	4	5	9	103	390	138	649	121	7,031	1.72
1960	7	5	14	98	418	165	707	124	7,320	1.69
1961	4	4	8	82	402	108	608	98	6,909	1.42
1962	3	5	14	105	425	130	682	127	6,794	1.87
1963	6	2	14	79	465	141	707	101	6,570	1.54
1964	4	4	20	85	384	146	643	113	6,623	1.71
1965	3	6	15	73	410	93	600	97	6,175	1.57
1966	4	4	10	76	478	18	590	94	6,158	1.53
1967	5	9	8	65	389	36	512	87	5,271	1.65
1968	4	10	8	65	293	77	457	87	5,205	1.67
1969	5	5	6	76	361	42	495	92	5,956	1.54
TOTAL	141	156	363	2,306	8,686	2,699	14,351	2,966	143,315	2.07

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(1) Differs from year-of-discovery total because of consolidations.

A Fields......................Over 50 million barrels or over 300 billion cubic feet
B Fields........................25-50 million barrels or 150-300 billion cubic feet
C Fields..........................10-25 million barrels or 60-150 billion cubic feet
D Fields.............................1-10 million barrels or 6-60 billion cubic feet
E Fields..............Less than 1 million barrels or less than 6 billion cubic feet
F Fields...Abandoned as non-profitable

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 8a

HISTORICAL RECORD: NUMBER OF U.S. NEW FIELD OIL AND GAS DISCOVERIES PROVED AFTER SIX YEARS TO BE OF SIGNIFICANT SIZE

Year Drilled	Number of Fields in Each Size Classification After Six Years of Development History							Total(1) Significant Size Oil & Gas Fields	Total New-Field Wildcats Drilled	Percent of A-D Fields in Total New-Field Wildcats Drilled
	A	B	C	D	E	F	Total(1)			
	(SIGNIFICANT)							A-D INCLUSIVE (A+B+C+D)		
Cumulative total 1947-1969	141	156	363	2,306	8,686	2,699	14,351	2,966	143,315	2.07
1970	11	3	9	61	309	31	424	84	4,467	1.88
1971	1	3	8	73	319	26	430	85	4,402	1.93
1972	3	5	7	94	448	14	571	109	5,079	2.15
1973	1	7	14	85	576	30	713	107	4,981	2.15
1974	1	4	5	101	648	18	777	111	5,646	1.97
1975	2	3	7	106	727	13	858	118	6,096	1.94
1976	3	2	12	101	809	31	958	118	5,828	2.02
1977	1	4	4	82	797	25	913	91	6,092	1.49
1978	1	3	5	84	826	21	940	93	6,497	1.43
1979	0	2	7	53	1,066	29	1,157	62	6,406	0.97
1980	0	1	7	79	1,207	49	1,343	87	7,023	1.24
1981	1	2	4	92	1,162	67	1,328	99	8,037	1.23
TOTAL	166	195	452	3,317	17,580	3,053	24,763	4,130	213,869	1.93

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(1) Differs from year-of-discovery total because of consolidations.

A Fields......................Over 50 million barrels or over 300 billion cubic feet
B Fields........................25-50 million barrels or 150-300 billion cubic feet
C Fields........................10-25 million barrels or 60-150 billion cubic feet
D Fields............................1-10 million barrels or 6-60 billion cubic feet
E Fields..............Less than 1 million barrels or less than 6 billion cubic feet
F Fields...Abandoned as non-profitable

Source: American Association of Petroleum Geologists, North American Drilling Activity

Section III
Table 9

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, ONSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg. Depth Per Well (ft.)	Avg. Cost Per Well ($)	Avg. Cost Per Foot ($)
1959	25,136	94,331.7	1,232,591.0	3,753	49,037	13.07	4,974	26,688.7	460,307.0	5,366	92,543	17.25
1960	20,933	81,168.8	914,306.8	3,878	43,678	11.26	5,175	28,035.4	487,477.5	5,417	94,199	17.39
1961	20,868	79,736.6	971,144.0	3,821	46,537	12.18	5,588	29,454.2	489,799.2	5,271	87,652	16.63
1962	20,060	83,168.5	1,041,452.5	4,146	51,917	12.52	5,743	30,171.3	511,755.7	5,254	89,109	16.96
1963	20,306	77,410.4	940,225.3	3,812	46,303	12.15	4,689	24,626.5	392,325.1	5,252	83,669	15.93
1964	20,535	76,376.6	898,606.9	3,719	43,760	11.77	4,749	25,991.9	447,248.1	5,473	94,177	17.21
1965	18,370	74,627.6	873,769.0	4,062	47,565	11.71	4,654	25,113.4	418,669.6	5,396	89,959	16.67
1966	15,312	60,104.3	745,319.5	3,925	48,676	12.40	3,914	23,217.3	446,177.6	5,932	113,995	19.22
1967	14,196	53,676.0	692,118.9	3,781	48,755	12.89	3,390	19,821.8	401,857.7	5,847	118,542	20.27
1968	13,010	51,828.6	699,182.3	3,984	53,742	13.49	3,145	18,536.1	387,216.3	5,894	123,121	20.89
1969	12,330	52,726.3	790,280.2	4,276	64,094	14.99	3,705	21,237.3	439,917.4	5,732	118,736	20.71
1970	12,014	51,734.0	806,429.0	4,306	67,124	15.59	3,651	21,044.0	478,705.0	5,764	131,116	22.75
1971	11,096	45,672.2	731,152.7	4,116	65,893	16.01	3,494	20,086.7	471,309.2	5,749	134,891	23.46
1972	10,421	45,126.0	792,435.2	4,330	76,042	17.56	4,856	26,424.0	626,559.7	5,442	129,028	23.71
1973	9,407	41,980.9	825,029.7	4,462	87,704	19.65	6,243	34,368.7	843,960.4	5,505	135,185	24.56
1974	12,820	49,662.3	1,270,731.1	3,874	99,121	25.59	6,540	35,552.2	1,114,933.6	5,436	170,479	31.36

	DRY HOLES							ONSHORE WELLS DRILLED					
							1953(1)	49,197	198,056.0	2,447,219.3	4,026	49,743	12.36
							1955(1)	55,517	221,197.2	2,439,924.0	3,984	43,949	11.03
							1956(1)	56,646	227,580.3	2,669,624.0	4,018	47,128	11.73
1959	18,977	79,735.0	775,839.0	4,202	40,883	9.73		49,087	200,755.5	2,468,737.0	4,090	50,293	12.30
1960	17,427	71,568.4	716,918.5	4,107	41,138	10.02		43,595	180,772.6	2,216,900.0	4,147	50,852	12.26
1961	16,926	71,394.0	706,003.7	4,218	41,711	9.89		43,382	180,584.7	2,166,926.9	4,163	49,950	12.00
1962	16,381	72,462.6	751,889.5	4,424	45,900	10.38		43,184	185,802.4	2,305,097.8	4,303	53,379	12.41
1963	16,072	71,272.9	679,103.1	4,435	42,254	9.53		41,067	173,309.8	2,011,653.4	4,220	48,985	11.61
1964	17,207	76,197.6	723,760.5	4,428	42,062	9.50		42,491	178,566.2	2,069,615.5	4,202	48,707	11.59
1965	15,535	71,075.5	681,175.3	4,575	43,848	9.58		38,559	167,816.5	1,973,613.9	4,352	51,184	11.76
1966	14,168	62,730.4	638,085.6	4,428	45,037	10.17		33,394	146,051.9	1,829,582.8	4,374	54,788	12.53
1967	12,587	57,590.3	591,049.8	4,575	46,957	10.26		30,173	131,088.1	1,685,026.5	4,345	55,846	12.85
1968	12,099	60,145.4	665,359.2	4,971	54,993	11.06		28,254	130,510.1	1,741,757.7	4,619	61,646	13.35
1969	12,255	63,091.7	708,336.3	5,148	57,800	11.23		28,290	137,055.3	1,944,533.9	4,845	68,736	14.19
1970	10,454	53,874.0	695,037.0	5,153	66,485	12.90		26,119	126,652.0	1,980,171.0	4,849	75,813	15.63
1971	9,566	49,877.6	646,412.5	5,214	67,574	12.96		24,156	115,636.6	1,848,874.4	4,787	76,539	15.99
1972	10,173	53,984.4	762,721.5	5,307	74,975	14.13		25,450	125,534.4	2,181,716.4	4,933	85,726	17.38
1973	9,713	51,957.0	827,228.3	5,349	85,167	15.92		25,356	128,306.7	2,496,218.3	5,060	98,447	19.46
1974	11,291	58,327.5	1,301,354.0	5,166	115,256	22.31		30,651	143,542.0	3,687,018.7	4,683	120,290	25.69

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(1) Data pertaining to well classification not available.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, ONSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	15,993	63,641.3	2,003,955.3	3,979	125,302	31.49	7,383	40,613.6	1,667,555.1	5,501	225,864	41.06
1976	16,603	65,636.2	2,227,303.1	3,953	134,151	33.93	8,631	45,714.7	2,011,603.6	5,297	233,067	44.00
1977	17,789	72,090.0	2,654,029.9	4,052	149,195	36.82	11,086	58,791.0	2,924,519.8	5,303	263,803	49.74
1978	17,492	71,596.0	3,157,053.7	4,093	180,485	44.10	12,887	68,610.9	3,996,244.5	5,324	310,098	58.25
1979	18,894	77,021.0	3,983,757.0	4,076	210,847	51.73	13,626	72,733.1	5,010,426.4	5,337	367,710	68.90
1980	28,236	114,228.1	6,924,130.2	4,045	245,223	60.62	14,781	81,400.8	6,720,984.8	5,507	454,704	82.57
1981	38,310	158,514.8	11,948,475.5	4,138	311,889	75.38	17,018	95,089.6	10,125,963.9	5,588	595,015	106.49
1982	35,379	140,035.3	10,895,210.4	3,958	307,957	77.81	16,610	96,211.9	12,572,614.1	5,792	756,930	130.69
1983	33,026	126,511.5	8,004,608.8	3,831	242,373	63.27	12,626	69,362.9	6,642,729.5	5,494	526,115	95.76
1984	38,490	149,635.8	8,891,781.7	3,888	231,015	59.42	14,611	78,856.6	5,986,152.1	5,397	409,702	75.91
1985	33,431	133,489.2	7,875,373.3	3,993	235,571	59.00	13,547	72,431.8	5,747,252.8	5,347	424,245	79.34
1986	17,865	72,708.4	4,143,102.8	4,070	231,912	56.98	7,144	39,023.8	2,902,637.2	5,462	406,304	74.39
1987	15,102	62,430.3	3,073,405.2	4,134	203,510	49.23	7,113	38,125.7	2,338,144.9	5,360	328,714	61.33

	DRY HOLES						ONSHORE WELLS DRILLED					
1975	12,556	63,604.0	1,725,506.8	5,066	137,425	27.13	35,932	167,859.0	5,397,017.2	4,672	150,201	32.15
1976	12,679	63,250.0	1,747,814.4	4,989	137,851	27.63	37,913	174,600.9	5,986,721.1	4,605	157,907	34.29
1977	13,734	70,293.6	2,321,990.2	5,118	169,069	33.03	42,609	201,174.6	7,900,540.0	4,721	185,420	39.29
1978	15,079	78,655.3	3,330,509.1	5,216	220,870	42.34	45,458	218,662.2	10,483,807.4	4,814	230,626	47.91
1979	14,743	75,365.5	3,877,721.7	5,111	263,021	51.46	47,263	225,119.6	12,871,899.2	4,763	272,346	57.18
1980	17,722	87,898.7	5,308,941.9	4,959	299,567	60.41	60,739	283,527.7	18,954,056.8	4,667	312,057	66.86
1981	24,012	120,773.3	9,040,265.1	5,030	376,489	74.85	79,340	374,377.6	31,114,704.4	4,719	392,169	83.11
1982	23,199	111,833.9	9,806,473.8	4,821	422,711	87.68	75,188	348,081.1	33,274,298.3	4,629	442,548	95.60
1983	20,614	92,519.6	5,496,480.3	4,488	266,638	59.41	66,266	288,393.9	20,143,818.7	4,352	303,984	69.85
1984	22,688	107,837.2	5,304,338.9	4,753	233,795	49.19	75,789	336,329.6	20,182,272.7	4,438	266,296	60.01
1985	19,596	95,753.4	4,994,684.7	4,886	254,883	52.17	55,574	301,674.4	18,617,310.9	4,531	279,648	61.72
1986	11,266	55,149.6	2,910,348.2	4,895	258,330	52.77	36,275	166,881.9	9,956,088.3	4,600	274,461	59.67
1987	10,117	49,455.4	1,773,914.1	4,888	175,340	35.87	32,332	150,011.3	7,185,464.1	4,640	222,240	47.90

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 10

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, OFFSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1959	227	2,599.6	88,835.0	9,385	320,704	34.17	75	896.7	48,588.0	11,956	647,840	54.18
1960	301	2,865.0	98,197.1	9,518	326,236	34.27	87	1,042.9	52,700.8	11,988	605,757	50.53
1961	336	3,187.5	115,617.3	9,487	344,099	36.27	86	990.2	47,654.8	11,515	554,125	48.12
1962	342	3,326.0	119,019.6	9,725	348,011	35.78	115	1,260.5	57,016.1	10,961	495,792	45.23
1963	372	3,689.4	130,913.0	9,918	351,917	35.48	90	1,051.2	49,100.6	11,680	545,563	46.71
1964	477	4,612.2	164,388.0	9,669	344,629	35.64	125	1,502.0	63,316.0	12.016	506,528	42.16
1965	487	4,919.9	193,026.3	10,103	396,358	39.23	118	1,379.7	67,430.4	11,693	571,444	48.87
1966	544	5,449.4	240,434.0	10,017	441,974	44.12	146	1,756.8	97,073.9	12,033	664,890	55.25
1967	739	6,258.3	303,250.0	8,469	410,352	48.46	168	1,939.8	99,803.2	11,547	594,067	51.45
1968	757	6,627.4	390,146.0	8,755	515,384	58.87	179	1,995.7	106,519.8	11,149	595,083	53.38
1969	585	5,208.2	320,848.3	8,903	548,459	61.61	222	2,457.8	166,088.0	11,071	748,144	67.57
1970	533	4,683.0	281,628.0	8,786	528,382	60.14	193	2,049.0	138,878.0	10,617	719,575	67.78
1971	309	2,913.0	163,352.3	9,427	528,648	56.08	185	2,035.1	141,544.6	11,001	765,106	69.55
1972	332	3,273.5	213,035.8	9,860	641,674	65.08	230	2,460.6	175,825.9	10,698	764,460	71.46
1973	296	2,686.2	181,945.6	9,075	614,681	67.73	193	1,968.2	153,971.2	10,198	797,778	78.23
1974	253	2,102.9	169,594.7	8,312	670,335	80.65	155	1,578.8	151,606.7	10,186	978,108	96.02

	DRY HOLES						OFFSHORE WELLS DRILLED						
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
							1953(1)	82(2)	783.0	24,499.0	9,549	298,768	31.29
							1955(1)	414(3)	3,959.8	160,219.0	9,565	387,002	40.46
							1956(1)	479(4)	4,593.4	198,786.0	9,590	415,002	43.28
1959	124	1,260.6	44,936.0	10,166	362,387	35.65		476	4,756.9	182,359.0	9,994	383,107	38.34
1960	150	1,700.4	56,620.4	11,336	337,469	33.30		538	5,608.4	207,518.3	10,424	385,722	37.00
1961	184	1,906.6	67,963.7	10,362	369,368	35.65		606	6,084.4	231,235.8	10,040	381,577	38.00
1962	303	3,168.2	95,541.9	10,456	315,320	30.16		760	7,754.8	271,577.6	10,204	357,339	35.02
1963	324	3,429.7	111,196.9	10,586	343,200	32.42		786	8,170.2	291,210.5	10,395	370,497	35.64
1964	393	4,065.2	130,047.6	10,344	330,910	31.99		995	10,479.3	357,751.7	10,230	359,549	35.14
1965	432	4,588.9	167,366.0	10,623	387,421	36.47		1,037	10,888.6	427,822.6	10,500	412,558	39.29
1966	437	4,664.1	193,649.6	10,673	443,134	41.52		1,127	11,870.3	531,157.5	10,533	471,302	44.75
1967	458	4,719.5	211,098.7	10,305	460,914	44.73		1,365	12,917.7	614,151.9	9,464	449,928	47.54
1968	386	3,995.5	170,936.8	10,351	442,841	42.78		1,322	12,618.6	667,602.7	9,545	504,994	52.91
1969	384	3,983.9	179,201.1	10,375	466,670	44.98		1,191	11,649.9	666,137.4	9,782	559,309	57.18
1970	332	3,506.0	178,005.0	10,560	536,160	50.77		1,058	10,238.0	598,511.0	9,677	565,700	58.46
1971	390	4,059.3	217,720.1	10,409	558,257	53.63		884	9,007.4	522,617.1	10,189	591,196	58.02
1972	431	4,267.0	243,587.6	9,900	565,169	57.09		993	10,001.1	632,449.4	10,072	636,908	63.24
1973	399	3,699.7	242,397.1	9,272	607,512	65.52		888	8,354.1	578,313.9	9,408	651,254	69.23
1974	422	3,720.5	358,768.7	8,816	850,163	96.43		830	7,402.3	679,970.1	8,918	819,241	91.86

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(1) Data pertaining to well classification not available.
(2) Louisiana only.
(3) Includes Louisiana and Texas.
(4) Includes Louisiana, Texas and California.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute. Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

UNITED STATES
ESTIMATED DRILLING COSTS BY WELL CLASSIFICATION, OFFSHORE

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	283	2,426.5	252,551.7	8,574	892,409	104.08	271	2,762.3	337,855.3	10,193	1,246,699	122.31
1976	275	2,621.0	322,349.5	9,531	1,172,180	122.99	273	2,651.1	395,815.0	9,711	1,449,872	149.30
1977	288	2,570.4	418,724.6	8,924	1,453,905	162.90	393	3,722.3	674,579.0	9,471	1,716,486	181.23
1978	298	2,814.7	542,971.4	9,445	1,822,051	192.91	419	4,208.6	982,577.3	10,044	2,345,053	233.48
1979	349	3,240.0	694,803.4	9,283	1,990,841	214.46	453	4,606.7	1,227,705.6	10,169	2,710,166	266.51
1980	317	2,838.0	844,306.7	8,952	2,663,428	297.52	444	4,418.8	1,445,737.8	9,952	3,256,166	327.19
1981	415	3,467.3	1,074,328.8	8,355	2,588,744	309.85	515	5,168.0	2,122,169.8	10,035	4,120,718	410.64
1982	486	4,269.2	1,563,370.0	8,784	3,216,811	366.21	442	4,591.6	2,165,054.2	10,388	4,898,313	471.54
1983	459	4,312.4	1,499,152.3	9,395	3,266,127	347.65	293	3,124.5	1,213,032.8	10,664	4,140,044	388.96
1984	486	4,381.8	1,322,458.1	9,016	2,721,107	301.81	372	3,787.6	1,352,636.1	10,182	3,636,119	357.12
1985	369	3,400.2	1,265,696.9	9,215	3,430,073	372.23	307	3,274.7	1,299,888.9	10,667	4,234,166	396.94
1986	333	3,138.9	1,040,990.1	9,426	3,126,096	331.65	207	2,300.1	941,245.4	11,112	4,547,079	409.20
1987	224	2,171.7	696,024.5	9,695	3,107,252	320.50	142	1,548.4	421,324.9	10,904	2,967,077	272.11

	DRY HOLES						OFFSHORE WELLS DRILLED					
1975	474	4,594.4	583,789.7	9,693	1,231,624	127.06	1,028	9,783.2	1,174,196.7	9,517	1,142,215	120.02
1976	480	4,545.2	756,794.7	9,469	1,576,656	166.51	1,028	9,817.2	1,474,959.2	9,550	1,434,785	150.24
1977	536	5,227.2	962,609.5	9,752	1,795,913	184.15	1,217	11,519.9	2,055,913.1	9.466	1,689,329	178.47
1978	480	4,733.4	1,051,734.0	9,861	2,191,112	222.20	1,197	11,756.7	2,577,282.7	9,821	2,153,118	219.24
1979	458	4,545.7	1,284,522.2	9,925	2,804,633	282.58	1,260	12,392.5	3,207,031.2	9,835	2,545,262	258.80
1980	511	5,246.4	1,556,254.3	10,266	3,045,507	296.66	1,272	12,503.3	3,846,298.9	9,829	3,023,819	307.64
1981	546	5,787.8	2,354,253.5	10,599	4,311,820	406.80	1,476	14,422.5	5,550,752.1	9,771	3,760,672	384.87
1982	536	5,676.3	2,425,396.1	10,590	4,524,993	427.29	1,464	14,537.1	6,153,820.3	9,930	4,203,429	423.31
1983	518	5,395.0	2,248,538.9	10,415	4,340,809	416.78	1,270	12,831.9	4,960,724.0	10,104	3,906,082	386.59
1984	563	6,089.8	2,348,852.4	10,817	4,172,029	385.70	1,421	14,259.2	5,023,946.6	10,035	3,535,501	352.33
1985	571	6,141.0	2,513,705.9	10,755	4,402,287	409.32	1,247	12,815.9	5,079,291.7	10,277	4,073,287	396.35
1986	358	3,968.7	1,614,079.2	11,086	4,508,601	406.69	898	9,407.7	3,596,314.6	10,476	4,004,805	382.28
1987	343	3,625.1	935,935.9	10,569	2,728,676	258.18	709	7,345.3	2,053,285.3	10,360	2,896,030	279.64

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry" Annual, American Petroleum Institute. Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 11

UNITED STATES
ESTIMATED DRILLING COSTS, ALL WELLS BY CLASSIFICATION

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg. Cost Per Foot (
1959	25,413	96,931.3	1,321,426.0	3,814	51,998	13.63	5,049	27,585.5	508,895.0	5,464	100,791	18.45
1960	21,294	84,033.9	1,110,701.1	3,946	52,160	13.22	5,262	29,078.3	540,179.3	5,526	102,656	18.58
1961	21,204	82,924.1	1,086,761.4	3,911	51,253	13.11	5,674	30,444.4	537,433.9	5,366	94,719	17.65
1962	21,402	86,494.5	1,160,472.1	4,041	54,223	13.42	5,858	31,431.8	568,771.8	5,366	97,093	18.10
1963	20,678	81,099.8	1,071,138.2	3,922	51,801	13.21	4,779	25,677.7	441,425.7	5,373	92,368	17.19
1964	21,012	80,988.9	1,062,994.9	3,854	50,590	13.13	4,874	27,493.8	510,564.1	5,641	104,753	18.57
1965	18,857	76,547.5	1,066,795.3	4,059	56,573	13.94	4,772	26,493.2	486,100.0	5,552	101,865	18.35
1966	15,856	65,553.6	985,753.6	4,134	62,169	15.04	4,060	24,974.1	543,251.6	6,151	133,806	21.75
1967	14,935	59,934.3	995,368.9	4,013	66,647	16.61	3,558	21,761.6	501,660.9	6,116	140,995	23.05
1968	13,767	58,456.1	1,089,328.4	4,246	79,126	18.63	3,324	20,531.8	493,736.1	6,177	148,537	24.05
1969	12,915	57,934.4	1,117,128.5	4,486	86,499	19.28	3,927	23,695.2	606,005.4	6,034	154,318	25.58
1970	12,547	56,417.0	1,088,057.0	4,496	86,718	19.29	3,844	23,093.0	617,583.0	6,007	160,662	26.75
1971	11,405	48,585.2	894,505.1	4,260	78,431	18.41	3,679	22,121.8	612,853.8	6,013	166,582	27.70
1972	10,753	48,399.5	1,005,471.1	4,501	93,506	20.77	5,086	28,884.6	802,385.5	5,679	157,764	27.78
1973	9,705	44,667.1	1,006,975.3	4,602	103,758	22.54	6,427	36,336.9	997,931.6	5,654	155,272	27.46
1974	13,073	51,765.2	1,440,325.8	3,960	110,176	27.82	6,695	37,131.1	1,266,540.3	5,546	189,177	34.11

	DRY HOLES						TOTAL WELLS DRILLED					
							49,279	198,839.0	2,471,718.3	4,035	50,158	12.43
							55,931	225,157.0	2,600,143.0	4,026	46,488	11.5
							57,125	232,173.7	2,868,410.0	4,064	50,213	12.35
1959	19,101	80,995.6	820,775.0	4,240	42,970	10.13	49,563	205,512.4	2,651,096.0	4,146	53,500	12.90
1960	17,577	73,268.8	773,538.9	4,168	44,009	10.56	44,133	186,380.9	2,424,418.3	4,223	54,934	13.01
1961	17,110	73,300.6	773,967.3	4,284	45,235	10.56	43,988	186,669.1	2,398,162.6	4,244	54,518	12.85
1962	16,684	75,630.9	847,431.5	4,533	50,793	11.20	43,944	193,557.2	2,576,675.4	4,405	58,635	13.31
1963	16,396	74,702.6	790,300.1	4,556	48,201	10.58	41,853	181,480.1	2,302,864.0	4,336	55,023	12.69
1964	17,600	80,262.7	853,808.2	4,560	48,512	10.64	43,486	188,745.4	2,427,367.2	4,340	55,820	12.86
1965	15,967	75,664.4	848,541.2	4,739	53,143	11.21	39,596	178,705.1	2,401,436.5	4,513	60,648	13.44
1966	14,605	67,394.5	831,735.2	4,614	56,949	12.34	34,521	157,922.3	2,360,740.3	4,575	68,386	14.95
1967	13,045	62,309.9	802,148.5	4,777	61,491	12.87	31,538	144,005.8	2,299,178.4	4,566	72,902	15.97
1968	12,485	64,140.9	826,295.9	5,137	66,183	12.88	29,576	143,128.8	2,409,360.4	4,839	81,463	16.83
1969	12,639	67,075.6	887,537.4	5,307	70,222	13.23	29,481	148,705.2	2,610,671.3	5,044	88,554	17.56
1970	10,786	57,380.0	873,042.0	5,320	80,942	15.21	27,177	136,890.0	2,578,682.0	5,037	94,885	18.84
1971	9,956	53,936.9	864,132.7	5,418	86,795	16.02	25,040	124,644.0	2,371,491.5	4,978	94,703	19.03
1972	10,604	58,251.4	1,006,309.2	5,493	94,899	17.28	26,443	135,535.5	2,814,165.8	5,126	106,424	20.76
1973	10,112	55,656.7	1,069,625.4	5,504	105,778	19.22	26,244	136,660.8	3,074,532.3	5,207	117,152	22.50
1974	11,713	62,048.0	1,660,122.7	5,297	141,733	26.76	31,481	150,944.3	4,366,988.8	4,795	138,718	28.93

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(1) Data pertaining to well classification not available.

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry", Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

Section III
Table 11a

UNITED STATES
ESTIMATED DRILLING COSTS, ALL WELLS BY CLASSIFICATION

	OIL WELLS						GAS WELLS					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	16,276	66,067.8	2,256,507.0	4,059	138,640	34.15	7,654	43,375.9	2,005,410.4	5,667	262,008	46.23
1976	16,878	68,257.2	2,549,652.6	4,044	151,064	37.35	8,904	48,365.8	2,407,418.6	5,432	270,375	49.78
1977	18,077	74,660.3	3,072,754.5	4,130	169,981	41.16	11,479	62,513.2	3,599,098.8	5,446	313,538	57.57
1978	17,790	74,410.8	3,700,025.1	4,182	207,983	49.73	13,306	72,819.5	4,978,821.9	5,472	374,178	68.38
1979	19,243	80,261.0	4,678,560.4	4,170	243,130	58.30	14,079	77,339.9	6,238,126.0	5,493	443,080	80.66
1980	28,553	117,066.2	7,768,436.9	4,099	272,070	66.37	15,225	85,819.6	8,166,722.6	5,636	536,402	95.17
1981	38,725	161,982.1	13,022,804.3	4,183	336,289	80.40	17,533	100,257.5	12,248,133.7	5,718	698,576	122.17
1982	35,865	144,304.5	12,458,580.5	4,024	347,374	86.33	17,052	100,803.5	14,737,668.3	5,912	864,278	146.19
1983	33,485	130,823.9	9,503,761.1	3,907	283,821	72.64	12,919	72,487.3	7,855,762.3	5,611	608,078	108.37
1984	38,976	154,017.6	10,214,239.8	3,952	262,065	66.32	14,983	82,644.2	7,338,788.2	5,516	489,808	88.80
1985	33,800	136,889.5	9,141,070.2	4,050	270,446	66.78	13,854	75,706.5	7,047,141.7	5,465	508,672	93.09
1986	18,198	75,847.3	5,184,092.9	4,168	284,872	68.35	7,351	41,324.0	3,843,882.6	5,622	522,906	93.01
1987	15,326	64,602.0	3,769,429.7	4,215	245,950	58.35	7,255	39,674.1	2,759,469.8	5,469	380,354	69.55

	DRY HOLES						TOTAL WELLS DRILLED					
Year	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)	Total Wells	Total Footage (Thous)	Total Costs (Thous)	Avg Depth Per Well (ft.)	Avg Cost Per Well ($)	Avg Cost Per Foot ($)
1975	13,030	68,198.4	2,309,296.5	5,234	177,229	33.86	36,960	177,642.1	6,571,213.9	4,806	177,793	36.99
1976	13,159	67,795.2	2,504,609.1	5,152	190,334	36.94	38,941	184,418.1	7,461,680.3	4,736	191,615	40.46
1977	14,270	75,520.8	3,284,599.7	5,292	230,175	43.49	43,826	212,694.4	9,956,453.0	4,853	227,181	46.81
1978	15,559	83,388.7	4,382,243.2	5,359	281,653	52.56	46,655	230,618.9	13,061,090.0	4,943	279,950	56.64
1979	15,201	79,911.3	5,162,244.0	5,256	339,598	64.61	48,523	237,512.1	16,078,930.4	4,894	331,367	67.71
1980	18,233	93,145.1	6,865,196.2	5,108	376,525	73.71	62,011	296,031.0	22,800,355.7	4,773	367,682	77.03
1981	24,558	126,560.5	11,394,518.6	5,154	463,984	90.03	80,816	388,800.1	36,665,456.5	4,811	453,691	94.30
1982	23,735	117,510.1	12,231,869.9	4,951	515,352	104.09	76,652	362,618.2	39,428,118.6	4,731	514,378	108.73
1983	21,132	97,914.6	7,745,019.2	4,633	366,507	79.11	67,536	301,225.8	25,104,542.6	4,460	371,721	83.35
1984	23,251	113,927.0	7,653,191.4	4,900	329,155	67.18	77,210	350,588.7	25,206,219.3	4,541	326,463	71.90
1985	20,167	101,894.4	7,508,390.7	5,053	372,311	73.68	67,821	314,490.4	23,696,602.5	4,637	349,399	75.35
1986	11,624	59,118.3	4,524,427.4	5,086	389,232	76.53	37,173	176,289.6	13,552,402.8	4,742	364,577	76.88
1987	10,460	53,080.5	2,709,850.0	5,075	259,068	51.05	33,041	157,356.6	9,238,749.5	4,762	279,615	58.72

Source: "Joint Association Survey of the U.S. Oil and Gas Producing Industry", Annual, American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil and Gas Association.

FREE WORLD TOTAL WELL COMPLETIONS

Area/Country	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	29,467	27,300	28,755	27,602	32,893	39,097	41,455	46,479	48,513	51,263	62,462	80,537	88,101
Canada	3,108	3,175	3,548	4,621	4,227	4,242	6,221	6,197	7,170	7,489	8,813	6,927	6,464
Mexico	502	516	431	422	408	353	336	307	406	333	434	412	336
Total North America	33,077	30,991	32,734	32,645	37,528	43.692	48,012	52,938	56,089	59,085	71.709	87,876	94,901
Argentina	579	595	623	597	606	552	646	647	865	773	953	904	822
Brazil	177	175	179	128	176	228	288	245	256	385	463	668	1,045
Ecuador	37	81	59	58	37	15	19	16	16	40	23	27	27
Peru	135	121	117	89	152	161	150	160	157	451	540	426	149
Trinidad-Tobago	135	220	196	212	200	189	192	217	215	188	218	243	200
Venezuela	589	464	371	427	416	284	337	446	637	1,030	1,275	1,491	1,500
Other	177	189	158	127	140	128	156	194	183	289	326	380	357
Total Latin America	1,829	1,845	1,703	1,638	1,727	1,557	1,788	1,925	2,329	3,156	3,798	4,139	4,100
Total Western Hemisphere	34,906	32,836	34,437	34,283	39,255	45,249	49,800	54,908	58,418	62,241	75,507	92,015	99,001
Total North Sea	88	100	107	113	176	207	210	166	134	227	273	283	283
Other European	274	318	352	287	313	369	345	410	525	448	758	810	777
Total Europe	362	418	459	400	489	576	555	576	659	675	1,031	1,093	1,060
Algeria	115	109	80	83	79	107	54	130	60	267	249	159	0
Gabon	26	36	36	44	59	49	44	31	35	38	40	61	56
Libya	250	87	77	74	79	66	64	109	177	184	192	157	110
Nigeria	168	207	258	239	249	192	143	118	104	116	132	202	144
Other	150	214	194	157	162	191	130	208	208	236	257	369	461
Total Africa	709	653	645	597	628	605	435	596	584	841	870	948	771
Abu Dhabi(1)	7	19	37	37	64	49	82	67	78	89	123	146	169
Dubai(1)	0	7	16	18	17	17	30	31	12	7	13	11	23
Sharjah(1)	0	2	2	2	3	2	1	0	0	-	2	4	1
Iran	44	104	61	81	100	140	182	185	180	0	-	-	-
Iraq	6	17	0	16	2	0	2	NA	NA	66	67	-	-
Kuwait(2)	13	8	2	0	0	0	8	0	0	12	36	5	8
Saudi Arabia(2)	43	56	178	323	300	210	163	180	145	144	223	229	25
Neutral Zone(2)	23	12	9	13	19	14	15	4	0	3	4	5	6
Qatar	7	10	8	9	2	7	4	2	2	46	53	51	52
Oman	27	0	56	49	40	55	42	51	61	102	89	110	159
Other	72	58	56	61	83	102	75	124	107	143	207	210	128
Total Middle East	242	293	425	609	630	596	604	644	585	621	817	771	571
Indonesia	84	422	312	501	630	588	513	409	536	473	635	727	323
Other	162	157	223	197	180	157	229	295	440(4)	2,492	3,443	3,539	592
Total Far East	246	579	535	698	810	745	742	704	976	2,965	4,078	4,266	915
Total Eastern Hemisphere	1,559	1,943	2,064	2,304	2,557	2,522	2,336	2,520	2,804	5,102	6,796	7,078	3,317
TOTAL FREE WORLD	36,465	34,779	36,501	36,587	41,812	47,771	52,136	57,428	61,222	67,343	82,303	99,093	102,318

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(1) Member of United Arab Emirates.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(3) Less than one-tenth of one percent.
NA Not Available.

Source: United States, American Association of Petroleum Geologists and American Petroleum Institute
Rest of Free World, Oil and Gas Journal

Section III
Table 12a

FREE WORLD TOTAL WELL COMPLETIONS

Area/Country	1983	1984	1985	1986	1987
United States	75,738	84,983	70,806	39,015	35,232
Canada	7,095	8,765	12,564	5,991	7,078
Mexico	65	268	297	247	103
Total North America	82,898	94,016	83,667	45,253	42,413
Argentina	130	126	1,024	820	416
Brazil	1,145	963	1,074	1,086	950
Ecuador	10	25	22	33	30
Peru	23	150	160	148	152
Trinidad-Tobago	11	151	197	162	142
Venezuela	19	406	361	254	177
Other	49	241	299	394	336
Total Latin America	1,387	2,062	3,137	2,897	2,203
Total Western Hemisphere	84,285	96,078	86,706	48,150	43,616
Total North Sea	402	141	462	435	350
Other European	665	648	817	744	570
Total Europe	1,067	789	1,279	1,179	920
Algeria	32	NA	NA	NA	45
Gabon	62	43	46	21	31
Libya	--	99	NA	41	41
Nigeria	124	89	62	56	72
Other	475	450	401	337	314
Total Africa	693	NA	NA	NA	503
United Arab Emirates	34	143	NA	111	0
Iran	--	--	NA	58	0
Iraq	--	--	NA	40	89
Kuwait(1)	--	11	NA	59	23
Saudi Arabia(1)	--	--	NA	33	0
Neutral Zone(1)	--	--	NA	0	0
Qatar	--	8	NA	0	0
Oman	38	46	NA	210	0
Other	39	62	NA	141	28
Total Middle East	111	270	NA	652	140
Indonesia	969	756	658	647	586
Other	384	1,219	6,684(2)	6,234	6,641
Total Far East	1,353	1,975	7,340	6,881	7,250
Total Eastern Hemisphere	3,224	NA	NA	NA	8,813
TOTAL FREE WORLD	87,509	NA	NA	NA	52,429

(1) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(2) Includes 5,555 wells in China in 1985, 5,525 in 1986 and 5,721 in 1987.

Source: United States--American Petroleum Institute, Quarterly Completion Report
Rest of World--American Association of Petroleum Geologists

Section III
Table 13

FREE WORLD TOTAL EXPLORATORY WELL COMPLETIONS

Area/Country	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	7,693	6,922	7,539	7,466	8,619	9,214	9,234	9,961	10,677	10,484	11,916	15,168	16,482
Canada	1,537	1,534	1,633	2,219	1,735	1,649	2,481	2,801	3,144	2,925	3,857	3,074	2,346
Mexico	130	129	143	104	98	87	79	79	83	NA	85	63	65
Total North America	9,360	8,585	9,315	9,789	10,452	10,950	11,794	12,841	13,904	NA	15,858	18,305	18,893
Argentina	113	157	110	139	117	78	83	143	81	NA	110	127	107
Brazil	100	87	80	78	86	87	105	155	89	NA	166	245	328
Ecuador	20	15	20	8	5	3	3	5	3	NA	0	3	5
Peru	28	21	25	31	43	43	36	37	28	NA	13	17	12
Trinidad-Tobago	23	35	23	15	13	14	23	17	8	NA	51	16	23
Venezuela	90	44	64	63	76	35	45	48	60	NA	69	351	250
Other	70	60	77	50	65	61	67	56	60	NA	NA	211	150
Total Latin America	444	419	399	384	405	321	362	406	329	NA	409	970	879
Total Western Hemisphere	9,804	9,004	9,714	10,173	10,857	11,271	12,156	13,247	14,233	NA	16,267	19,275	19,772
Total North Sea	66	53	51	70	92	124	109	21	38	168	NA	135	201
Other European	93	146	159	147	151	172	163	231	259	157	NA	372	398
Total Europe	159	199	210	217	243	296	272	252	297	325	NA	507	599
Algeria	37	25	10	13	9	17	11	11	3	3	2	1	1
Gabon	13	11	17	15	13	23	19	19	20	22	15	23	16
Libya	51	41	34	25	32	36	22	33	41	30	35	43	34
Nigeria	31	55	61	45	51	33	21	24	35	22	31	26	30
Other	131	125	101	80	86	91	89	117	102	133	124	191	216
Total Africa	263	257	223	178	191	200	162	204	201	204	207	284	297
Abu Dhabi(1)	7	8	21	7	3	0	9	5	19	NA	6	NA	22
Dubai(1)	0	0	0	1	0	0	5	9	5	NA	2	NA	3
Sharjah(1)	0	2	1	0	0	0	1	0	0	NA	2	NA	1
Iran	11	6	2	18	27	26	26	25	10	NA	0	NA	0
Iraq	1	0	0	3	2	0	2	NA	NA	NA	0	NA	0
Kuwait(2)	1	2	0	0	0	0	2	0	0	NA	2	NA	8
Saudi Arabia(2)	2	2	6	3	4	9	24	4	25	NA	40	NA	25
Neutral Zone(2)	0	0	0	0	0	0	0	0	0	NA	0	NA	2
Qatar	2	1	6	1	0	0	0	0	0	NA	3	NA	4
Oman	2	0	16	0	0	0	0	10	24	NA	15	NA	31
Other	46	27	29	32	34	65	51	46	39	NA	18	NA	71
Total Middle East	72	48	81	65	70	100	120	99	122	NA	88	NA	167
Indonesia	84	135	137	169	176	186	130	115	146	NA	182	NA	167
Other	162	126	175	173	162	127	119	132	249(3)	NA	221	NA	297
Total Far East	246	261	312	342	338	313	249	247	395	377	403	125	464
Total Eastern Hemisphere	740	765	826	802	842	909	803	802	1,015	NA	698	916	1,527
TOTAL FREE WORLD	10,544	9,769	10,540	10,975	11,699	12,180	12,959	14,049	15,248	14,315	16,695	20,191	21,299

(1) Member of United Arab Emirates.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(3) Includes Oceania.
NA Not Available.
NOTE: Complete data for 1979 through 1981 is not available for all areas.

Source: United States, American Association of Petroleum Geologists and American Petroleum Institute
Rest of Free World, Oil and Gas Journal

FREE WORLD TOTAL EXPLORATORY WELL COMPLETIONS

Area/Country	1983	1984	1985	1986	1987
United States	13,845	15,138	12,208	7,156	6,715
Canada	2,041	2,863	3,404	2,034	2,369
Mexico	65	44	78	68	27
Total North America	15,951	18,045	15,690	9,258	9,111
Argentina	130	136	161	92	45
Brazil	262	243	229	163	176
Ecuador	10	3	2	4	9
Peru	23	29	13	11	13
Trinidad-Tobago	11	4	14	8	8
Venezuela	19	18	6	25	21
Other	49	66	111	84	129
Total Latin America	504	499	536	387	401
Total Western Hemisphere	16,455	18,544	16,448	9,645	9,512
Total North Sea	220	79	254	224	174
Other European	308	317	362	366	570
Total Europe	528	396	616	570	744
Algeria	2	3	25	30	25
Gabon	11	18	13	12	16
Libya	--	51	45	27	25
Nigeria	24	12	17	29	44
Other	167	124	184	143	154
Total Africa	204	208	284	241	264
United Arab Emirates	34	17	NA	13	0
Iran	--	--	NA	7	0
Iraq	--	--	NA	2	10
Kuwait(1)	--	11	NA	0	2
Saudi Arabia(1)	--	--	NA	6	0
Neutral Zone(1)	--	--	NA	0	0
Qatar	--	3	NA	0	0
Oman	38	29	NA	32	36
Other	39	50	NA	64	43
Total Middle East	111	110	NA	124	91
Indonesia	NA	216	208	122	75
Other(2)	NA	468	256	323	310
Total Far East	NA	684	464	445	385
Total Eastern Hemisphere	NA	1,398	NA	1,380	1,484
TOTAL FREE WORLD	NA	19,942	NA	11,025	10,996

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(1) Saudi Arabia and Kuwait share the production from the Neutral Zone on an equal basis.
(2) Includes Oceania.
NA=Not Available

Source: United States--American Petroleum Institute, Quarterly Completion Report
Rest of Free World--American Association of Petroleum Geologists

Section III
Table 14

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Alabama	2	4	5	9	8	3	2	8	8	7	7	4	5	6
Alaska	0	0	0	0	0	0	0	0	0	0	0	5	9	9
Arkansas	18	17	17	19	26	20	16	17	23	20	14	12	14	13
Arizona	0	0	1	1	1	1	1	1	1	1	1	0	1	1
California	173	134	157	165	169	138	143	119	97	80	93	80	82	97
Colorado	9	11	25	34	43	66	75	60	47	36	43	35	27	30
Florida	7	2	1	3	6	3	2	1	1	1	0	2	1	1
Georgia	0	0	0	2	1	0	0	0	0	0	0	1	1	0
Idaho	0	2	0	2	1	0	0	0	0	0	0	0	0	0
Illinois	68	66	61	66	69	80	96	75	49	46	37	37	37	32
Indiana	22	25	23	22	18	8	7	9	6	7	7	8	4	6
Iowa	0	0	0	0	0	1	2	1	2	3	2	0	1	1
Kansas	115	129	165	162	164	157	178	169	155	130	138	112	105	101
Kentucky	6	12	19	17	15	16	12	10	9	6	7	6	5	6
Louisiana	239	231	243	257	280	312	401	442	423	309	332	287	275	261
Maryland	0	0	0	0	0	0	1	0	1	0	1	0	0	0
Michigan	19	14	21	17	18	16	12	12	12	9	26	35	23	15
Mississippi	31	30	39	29	28	32	33	25	34	44	67	61	58	46
Missouri	0	0	0	0	1	0	0	1	1	1	0	1	1	1
Montana	10	8	14	36	41	31	38	38	29	23	22	20	23	27
Nebraska	1	9	15	17	15	24	37	32	32	22	25	23	26	16
Nevada	0	0	0	0	1	2	1	1	0	0	1	0	1	0
New Mexico	48	56	97	149	162	98	117	132	144	109	113	106	102	94
New York	0	0	0	0	0	0	0	1	0	1	1	1	1	2
North Carolina	0	0	0	0	1	0	0	0	0	0	0	0	0	0
North Dakota	0	1	4	24	31	32	23	24	31	33	30	16	15	14
Ohio	0	0	0	0	1	1	2	1	0	2	3	5	7	8
Oklahoma	238	269	302	326	344	330	326	286	243	204	226	179	197	174
Oregon	0	1	0	0	0	1	1	0	0	0	0	1	0	0
Pennsylvania	0	0	0	4	8	10	5	5	12	10	11	10	8	9
South Dakota	0	1	1	1	3	2	2	1	1	1	4	1	1	1
Tennessee	0	0	0	0	0	0	1	0	1	0	0	0	1	0
Texas	922	1,063	1,230	1,173	1,039	1,018	1,359	1,054	951	719	750	604	628	570
Utah	11	4	16	23	15	14	13	21	47	37	32	29	33	29
Virginia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Washington	0	0	0	0	1	0	0	1	1	0	1	1	1	1
West Virginia	0	0	0	0	1	2	1	2	3	4	6	5	9	13
Wyoming	78	65	88	83	102	90	79	71	65	58	74	63	58	53
TOTAL	2,017	2,154	2,544	2,641	2,613	2,508	2,688	2,620	2,429	1,923	2,074	1,750	1,760	1,637

Source: Hughes Tool Company

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

STATE	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	5	2	1	2	2	3	6	7	8	15	13	12	14	17
Alaska	6	5	6	13	21	20	28	14	5	5	5	9	14	14
Arkansas	10	9	11	10	8	7	16	13	15	15	15	18	14	15
Arizona	1	2	1	1	3	1	2	0	1	0	2	1	0	1
California	85	93	89	79	83	87	78	52	46	46	51	72	80	89
Colorado	23	21	19	16	16	17	23	25	30	35	42	46	42	38
Florida	0	1	4	2	2	1	1	4	11	18	9	7	9	5
Georgia	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Idaho	1	0	0	0	0	0	0	1	0	0	1	0	0	1
Illinois	25	20	24	30	30	22	17	14	13	14	6	7	19	22
Indiana	6	6	5	5	3	2	1	1	1	1	0	1	2	0
Iowa	1	0	0	1	0	0	0	0	1	2	1	0	2	0
Kansas	96	87	70	56	41	35	38	30	29	24	28	44	57	51
Kentucky	10	8	12	13	9	5	2	1	2	2	1	2	1	1
Louisiana	265	282	270	256	235	233	230	204	194	215	205	203	228	231
Maryland	0	2	2	4	0	1	1	0	0	1	0	0	0	1
Michigan	14	13	11	9	10	10	10	11	12	17	20	24	28	24
Mississippi	46	39	35	34	33	36	40	43	39	37	29	29	25	32
Missouri	1	0	0	1	0	0	0	0	0	0	1	0	0	0
Montana	22	21	26	24	22	34	31	17	17	20	19	24	27	28
Nebraska	12	11	10	8	5	5	10	6	5	6	5	7	9	8
Nevada	0	1	2	1	1	2	0	0	0	0	0	1	0	2
New Mexico	84	79	65	60	56	68	64	40	47	56	62	79	71	54
New York	1	1	1	1	1	1	0	0	1	0	1	7	8	9
North Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Dakota	9	14	12	12	11	13	12	9	9	7	10	12	17	19
Ohio	12	56	22	14	18	22	22	24	17	22	36	30	21	26
Oklahoma	158	158	163	141	101	106	120	98	90	90	115	146	177	186
Oregon	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Pennsylvania	12	11	9	10	7	5	7	9	9	8	11	14	10	10
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	1	1	2	0	0	1	1	2	1	1	1	1	1	2
Tennessee	0	0	0	1	1	0	1	2	1	0	0	0	0	0
Texas	500	477	425	387	340	329	322	302	291	338	376	508	638	653
Utah	22	17	14	14	15	12	12	12	17	34	38	42	26	19
Virginia	1	1	1	0	0	0	0	1	1	0	1	2	3	0
Washington	1	0	0	1	1	0	0	0	0	0	0	0	0	0
West Virginia	14	16	24	19	15	16	18	16	17	17	20	16	10	12
Wyoming	55	48	50	48	44	75	81	71	45	61	70	107	107	86
TOTAL	1,500	1,502	1,387	1,273	1,134	1,169	1,194	1,028	976	1,107	1,195	1,471	1,660	1,656

Source: Hughes Tool Company

U.S. ANNUAL AVERAGE ROTARY RIG ACTIVITY BY STATE

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Alabama	13	13	13	11	17	15	16	15	22	10	11	12
Alaska	15	16	13	14	23	22	14	14	20	13	6	12
Arkansas	14	14	10	27	34	27	26	26	24	10	9	8
Arizona	1	0	0	1	1	1	0	0	0	0	0	0
California	90	94	96	120	155	129	106	107	80	49	61	60
Colorado	45	41	40	61	82	60	52	54	50	24	25	29
Florida	6	6	5	4	8	5	4	4	7	2	3	1
Georgia	0	0	0	0	1	2	0	0	0	0	0	0
Hawaii	0	0	0	0	1	0	1	0	0	0	0	0
Idaho	1	3	2	3	3	2	1	1	1	1	0	1
Illinois	16	28	13	25	45	76	60	41	28	6	3	4
Indiana	3	4	0	0	1	7	6	7	4	1	1	0
Iowa	1	0	0	0	0	0	0	0	0	0	0	0
Kansas	67	76	66	120	196	157	124	128	91	47	49	40
Kentucky	2	3	0	0	5	10	8	8	6	3	2	5
Louisiana	292	338	347	427	456	343	283	310	282	142	135	163
Maryland	0	1	1	0	1	0	0	0	0	0	0	0
Michigan	24	24	25	31	36	31	29	34	34	24	22	20
Mississippi	41	44	40	58	71	42	33	32	31	15	13	18
Missouri	0	0	0	0	0	0	0	0	0	0	0	0
Montana	27	30	33	49	81	36	24	36	23	10	9	8
Nebraska	9	10	9	14	15	9	9	9	6	3	5	3
Nevada	3	2	4	5	5	3	1	5	5	3	2	2
New Mexico	69	76	88	118	135	103	65	78	71	29	35	37
New York	7	7	9	7	12	15	10	9	5	2	2	1
North Carolina	0	0	0	0	0	0	0	0	0	0	0	0
North Dakota	24	39	56	83	119	69	43	51	38	13	14	15
Ohio	33	45	46	75	98	57	39	51	29	18	20	14
Oklahoma	233	258	247	397	698	622	285	319	251	141	136	125
Oregon	0	0	1	1	2	1	0	0	0	0	0	0
Pennsylvania	15	25	29	29	44	33	22	36	30	18	17	19
Rhode Island	1	4	4	2	2	2	0	0	0	0	0	0
South Dakota	3	2	1	2	2	2	1	2	2	1	0	1
Tennessee	0	0	0	1	0	2	1	0	0	0	0	0
Texas	778	855	770	988	1,316	990	796	850	677	311	293	280
Utah	30	32	29	42	69	40	37	45	29	11	7	6
Virginia	1	1	1	1	3	2	2	2	4	(1)	(1)	(1)
Washington	0	0	0	0	1	1	1	1	0	(1)	(1)	(1)
West Virginia	17	27	30	38	45	49	34	38	26	15	13	13
Wyoming	120	137	147	156	191	143	96	115	93	35	39	37
Other										7	3	4
TOTAL	2,001	2,255	2,176	2,910	3,970	3,105	2,229	2,428	1,969	964	936	936

(1) Included in other.

Source: Hughes Tool Company

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1967 Explor-atory	1967 Develop-ment	1967 Total(1)	1968 Explor-atory	1968 Develop-ment	1968 Total(1)	1969 Explor-atory	1969 Develop-ment	1969 Total(1)
Alabama	28	10	38	18	14	32	34	14	48
Alaska	33	41	74	18	86	107	12	51	67
Offshore*	--	--	--	N.A.	N.A.	N.A.	2	44	50
Arizona	14	10	24	6	4	10	24	14	39
Arkansas	87	320	409	111	211	322	131	288	422
California	352	2,182	2,668	353	2,366	2,888	288	1,712	2,167
Offshore*	12	73	101	28	304	367	17	210	262
Colorado	277	262	539	270	224	495	538	276	820
Florida	11	--	11	9	4	13	8	5	13
Georgia	--	--	--	--	--	--	2	--	2
Illinois	328	861	1,339	253	789	1,226	241	639	988
Indiana	254	220	510	158	179	367	178	189	407
Iowa	1	--	25	--	--	22	--	--	7
Kansas	1,270	1,937	3,345	1,186	1,849	3,107	1,058	1,919	3,105
Kentucky	458	1,086	1,647	453	828	1,379	256	696	1,030
Louisiana	935	2,209	3,185	1,026	2,415	3,478	865	2,272	3,174
Offshore*	296	559	867	352	696	1,068	147	678	835
Michigan	173	191	365	174	196	380	164	168	348
Minnesota	--	--	--	--	--	1	--	--	--
Mississippi	347	368	722	382	297	688	373	342	716
Missouri	4	--	19	4	12	38	7	22	57
Montana	302	252	580	465	400	882	499	296	834
Nebraska	95	84	179	196	89	288	285	98	388
Nevada	7	2	9	--	--	--	14	2	16
New Mexico	166	925	1,118	154	743	925	190	984	1,219
New York	35	176	238	9	97	120	6	128	166
North Carolina	--	--	--	--	--	--	--	--	--
North Dakota	60	93	156	121	62	186	178	74	252
Ohio	75	1,188	1,267	79	1,084	1,165	53	1,185	1,255
Oklahoma	421	2,431	3,074	422	2,318	2,996	546	2,567	3,395
Oregon	1	--	1	--	--	--	--	--	--
Offshore*	1	--	1	--	--	--	--	--	--
Pennsylvania	59	564	683	62	733	897	43	853	1,018
South Dakota	4	--	4	4	--	4	56	--	56
Tennessee	47	--	47	25	1	26	23	3	27
Texas	2,508	6,628	9,576	2,207	5,407	8,743	2,718	5,938	9,233
Offshore*	61	41	102	40	13	53	103	11	114
Utah	67	75	144	41	58	99	103	71	175
Vermont	--	--	--	--	--	--	1	--	1
Virginia	--	--	--	--	--	--	8	2	10
Washington	3	--	3	2	--	2	--	--	--
Offshore*	1	--	1	--	--	--	--	--	--
West Virginia	36	738	777	87	646	735	83	819	920
Wyoming	420	505	1,042	584	608	1,293	716	859	1,678
Total	8,878	23,356	33,818	8,879	21,720	32,914	9,701	22,486	34,053

* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

(3) Prior to 1970, well data shown are for wells reported to the API for that year. Because the time span between the time wells were actually completed and when they were reported to the API began to grow significantly, the date of publication began to seriously lag the actual well-completion date. Hence, beginning in 1970, the statistics show the year in which the wells were completed, regardless of the time frame in which they were reported to the API.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1970(3) Explor atory	1970(3) Develop- ment	1970(3) Total(1)	1971 Explor- atory	1971 Develop- ment	1971 Total(1)	1972 Explor- atory	1972 Develop- ment	1972 Total(1)
Alabama	30	16	46	55	21	79	87	32	119
Alaska	30	45	77	5	28	33	12	13	30
Offshore*	1	16	19	--	1	1	--	4	7
Arizona	9	3	13	10	4	15	13	10	23
Arkansas	87	230	328	93	235	351	98	240	344
California	243	1,791	2,316	221	1,591	2,095	193	1,202	1,674
Offshore*	15	117	144	15	56	76	4	55	80
Colorado	461	249	710	605	385	990	473	501	975
Florida	13	16	29	18	22	42	39	67	109
Georgia	3	--	3	1	--	1	2	--	2
Idaho	--	--	--	--	--	--	1	--	1
Illinois	198	482	753	152	406	622	157	453	655
Indiana	149	143	307	110	101	228	130	138	284
Iowa	3	--	5	1	--	1	--	--	--
Kansas	882	1,642	2,574	735	1,603	2,398	773	1,645	2,498
Kentucky	234	594	892	213	557	829	217	541	817
Louisiana	669	2,376	3,084	830	2,198	3,078	731	2,481	3,244
Offshore*	150	788	953	274	564	861	200	797	1,008
Maryland	--	--	--	--	--	--	1	--	1
Michigan	152	126	281	162	141	306	182	127	317
Mississippi	232	310	563	213	287	524	237	184	455
Missouri	4	10	15	7	7	15	3	--	4
Montana	307	148	473	323	134	485	430	287	733
Nebraska	167	83	251	130	83	215	185	90	275
Nevada	2	--	9	6	--	6	2	--	2
New Mexico	159	580	774	158	696	867	200	864	1,093
New York	11	88	110	10	90	129	14	115	144
North Carolina	--	--	--	12	--	12	2	--	2
North Dakota	87	57	145	98	60	158	60	33	94
Ohio	85	1,310	1,346	41	1,210	1,256	64	1,484	1,548
Oklahoma	452	2,135	2,783	430	1,815	2,444	400	1,888	2,502
Oregon	--	--	--	2	--	2	--	--	--
Pennsylvania	43	664	759	21	719	786	83	946	1,100
South Dakota	64	1	65	24	8	32	18	1	19
Tennessee	50	48	98	113	57	170	68	27	95
Texas	2,022	5,681	8,130	1,848	5,427	7,737	2,077	5,839	8,365
Offshore*	49	8	57	31	7	38	52	6	58
Utah	46	40	87	61	36	98	77	76	153
Virginia	--	--	--	--	7	7	1	15	16
Washington	--	--	12	--	--	--	--	--	--
West Virginia	88	998	1,111	66	696	768	89	576	669
Wyoming	504	872	1,393	357	513	903	432	508	1,058
Total	7,436	20,737	29,542	7,131	19,137	27,682	7,551	20,383	29,420

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* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

Section III
Table 15b

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1973			1974			1975		
	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	72	39	111	48	38	86	76	53	130
Alaska	13	19	33	12	27	39	24	41	69
Offshore*	3	8	10	--	11	11	1	13	14
Arizona	2	8	10	1	1	2	1	--	2
Arkansas	79	206	292	91	231	325	77	245	330
California	202	1,073	1,393	253	1,915	2,397	213	2,028	2,694
Offshore*	2	50	65	5	67	79	5	56	66
Colorado	462	478	945	374	537	919	405	762	1,172
Florida	34	23	60	28	11	40	34	17	52
Georgia	4	--	4	5	--	5	3	--	3
Idaho	5	--	5	2	--	2	1	--	1
Illinois	213	386	656	225	577	855	258	764	1,129
Indiana	139	100	259	168	208	389	156	217	400
Iowa	--	--	--	2	--	2	--	--	--
Kansas	754	1,416	2,244	855	1,913	2,960	909	2,444	3,728
Kentucky	165	458	652	197	508	759	341	631	1,013
Louisiana	678	2,015	2,719	652	2,120	2,833	722	2,322	3,105
Offshore*	202	548	760	149	452	620	147	525	679
Maryland	--	--	1	1	--	1	1	--	3
Michigan	191	113	307	264	165	441	282	249	536
Mississippi	209	145	367	288	148	440	260	183	454
Missouri	11	2	13	20	7	96	19	6	95
Montana	448	233	685	420	369	792	355	503	858
Nebraska	102	67	176	167	91	263	206	133	347
Nevada	--	--	--	2	--	2	5	--	5
New Mexico	191	849	1,083	215	963	1,193	162	974	1,173
New York	21	177	222	53	264	373	35	538	610
North Carolina	7	--	7	3	--	3	1	--	1
North Dakota	71	51	129	76	68	145	105	100	205
Ohio	160	1,563	1,724	134	1,414	1,552	157	1,400	1,558
Oklahoma	353	2,000	2,470	399	2,846	3,386	411	3,404	3,960
Pennsylvania	94	1,151	1,299	124	1,303	1,559	88	1,116	1,270
South Dakota	16	1	17	11	2	17	24	3	27
Tennessee	68	29	99	117	64	181	169	63	232
Texas	2,416	5,906	8,658	3,141	6,881	10,321	3,291	9,588	13,276
Offshore*	69	11	80	157	8	166	150	15	166
Utah	77	131	208	55	153	211	64	129	196
Virginia	4	17	20	8	37	45	8	28	36
West Virginia	109	749	858	81	657	741	95	661	772
Wyoming	102	516	938	463	550	1,026	473	822	1,327
N. Gulf of Mexico(2)	--	--	--	14	--	14	33	1	34
Total	7,771	19,921	28,662	8,969	24,068	34,515	9,459	27,425	40,804

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* Included in state total.

(1) Includes service wells, stratigraphic and core tests.

(2) Northern Gulf of Mexico was a new area designated in 1972 by the Bureau of Land Management for federally controlled Outer Continental Shelf Waters not previously mapped or leased.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1976 Exploratory	1976 Development	1976 Total(1)	1977 Exploratory	1977 Development	1977 Total(1)	1978 Exploratory	1978 Development	1978 Total(1)
Alabama	54	62	116	47	88	136	60	101	161
Alaska	6	54	77	21	48	73	12	55	76
Offshore*	--	13	18	3	12	19	2	7	11
Arizona	2	--	2	2	2	4	--	8	8
Arkansas	80	348	438	82	399	491	95	347	450
Atlantic Coast	--	--	--	--	--	1	7	--	7
California	257	2,161	2,808	275	1,938	2,553	359	1,639	2,485
Offshore*	7	21	28	17	39	63	15	65	85
Colorado	389	762	1,152	392	791	1,212	449	701	1,156
Florida	9	16	26	14	15	32	15	11	29
Georgia	3	--	3	--	--	--	1	--	1
Idaho	2	--	2	1	--	1	7	--	7
Illinois	226	1,058	1,484	238	851	1,143	277	855	1,202
Indiana	196	291	509	276	337	621	268	401	685
Iowa	--	--	--	1	--	1	--	--	--
Kansas	893	2,646	3,705	1,043	2,899	4,060	1,181	3,312	4,576
Kentucky	425	742	1,189	368	688	1,075	353	657	1,077
Louisiana	607	2,719	3,373	640	2,753	3,439	782	3,001	3,817
Offshore*	94	473	572	138	634	785	121	594	723
Maryland	--	2	3	--	--	3	--	--	3
Mass.-Offshore	--	--	1	--	--	--	--	--	--
Michigan	294	213	530	297	243	545	267	257	539
Mississippi	265	233	504	272	255	539	241	248	496
Missouri	9	13	44	8	4	53	6	26	49
Montana	362	409	773	273	400	679	324	453	778
Nebraska	193	119	312	235	186	425	265	183	451
Nevada	8	--	8	12	6	18	14	7	22
New Jersey	--	--	1	--	--	--	--	--	--
New Mexico	162	859	1,042	180	1,210	1,407	205	1,375	1,625
New York	40	419	519	49	345	485	45	330	427
North Carolina	--	--	1	--	--	--	--	--	--
North Dakota	122	122	245	111	131	242	162	178	341
Ohio	133	2,071	2,205	81	2,685	2,768	77	3,254	3,333
Oklahoma	452	4,104	4,741	490	4,821	5,344	495	5,641	6,164
Oregon	--	--	--	2	--	2	--	--	--
Pennsylvania	67	1,212	1,316	116	1,433	1,569	94	2,013	2,182
South Dakota	29	6	36	20	23	43	21	29	50
Tennessee	153	46	199	177	110	287	149	115	264
Texas	3,276	9,335	12,982	3,726	10,898	15,114	4,085	11,260	15,863
Offshore*	174	130	304	131	180	311	160	147	307
Utah	41	87	131	103	184	305	80	186	268
Virginia	3	8	11	9	16	25	5	26	31
Washington	3	--	3	--	--	--	--	--	--
West Virginia	114	875	1,035	115	1,112	1,267	151	1,352	1,537
Wyoming	415	630	1,059	440	827	1,281	470	996	1,489
N. Gulf of Mexico(2)	27	1	28	17	17	34	4	14	18
TOTAL	9,317	31,623	42,614	10,140	35,715	47,308	11,030	39,031	51,671

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* Included in state total.
(1) Includes service wells, stratigraphic and core tests.
(2) Northern Gulf of Mexico was a new area designated in 1972 by the Bureau of Land Management for federally controlled Outer Continental Shelf Waters not previously mapped or leased.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

	1979			1980			1981		
STATE/AREA	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)	Exploratory	Development	Total(1)
Alabama	101	118	219	77	119	196	75	142	222
Alaska	14	71	96	16	108	125	20	146	172
Offshore*	2	5	8	--	5	6	--	4	5
Arizona	2	1	4	6	--	6	8	5	14
Arkansas	105	393	504	111	496	612	154	723	889
Atlantic Coast(2)	18	--	18	4	--	4	5	--	5
California	395	1,592	2,340	443	2,072	3,039	538	2,593	3,838
Offshore*	8	85	123	7	77	137	7	148	193
Colorado	456	607	1,069	553	857	1,414	849	1,122	1,977
Florida	11	20	32	8	11	21	10	15	25
Georgia	--	--	--	1	--	1	2	--	2
Idaho	3	--	3	5	--	5	5	--	5
Illinois	284	967	1,327	487	1,828	2,482	736	2,550	3,436
Indiana	183	302	494	327	406	751	347	460	828
Kansas	1,022	3,338	4,436	1,237	4,923	6,266	1,848	6,452	8,551
Kentucky	423	709	1,195	619	1,463	2,171	870	2,030	3,062
Louisiana	665	3,358	4,063	808	4,223	5,147	971	4,362	5,503
Offshore*	123	598	723	146	493	644	176	503	680
Maryland	--	--	--	1	--	1	1	--	1
Michigan	255	264	538	316	345	676	402	362	787
Mississippi	242	281	534	310	360	680	357	431	788
Missouri	15	56	85	22	143	266	78	189	397
Montana	349	471	822	382	507	902	521	744	1,289
Nebraska	265	184	450	252	260	514	279	327	608
Nevada	11	--	12	20	1	21	28	2	34
New Mexico	212	1,396	1,656	273	1,793	2,126	358	2,099	2,527
New York	60	437	513	59	436	507	79	492	578
North Carolina	--	--	--	--	--	--	--	--	--
North Dakota	175	265	440	256	360	619	461	417	879
Ohio	114	3,532	3,657	66	5,023	5,093	151	5,926	6,082
Oklahoma	479	6,477	6,980	554	9,568	10,158	733	12,357	13,125
Oregon	17	4	21	32	9	41	20	--	20
Offshore*	--	--	--	--	--	--	--	--	--
Pennsylvania	105	2,068	2,295	255	2,833	3,261	342	3,517	3,962
South Dakota	32	17	49	33	41	75	47	43	90
Tennessee	163	185	348	293	257	550	333	295	628
Texas	3,910	11,414	15,810	4,354	15,172	20,038	5,688	20,291	26,442
Offshore*	123	87	210	113	132	245	125	114	239
Utah	89	187	284	112	177	291	208	347	555
Virginia	4	21	25	2	25	27	6	26	32
Washington	--	--	6	2	--	3	--	--	--
Offshore*	--	--	--	--	--	--	--	--	--
West Virginia	124	1,445	1,612	119	1,752	1,924	170	1,948	2,170
Wyoming	411	963	1,392	435	1,037	1,518	708	1,289	2,043
N. Gulf of Mexico	18	12	30	16	11	27	22	12	34
Alaska(2)	3	--	3	4	--	4	--	--	--
Pacific Coast(2)	--	--	--	--	--	--	--	--	--
Total	10,738	41,155	53,362	12,870	56,616	71,562	17,430	71,804	91,600

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* Included in state total

(1) Includes service wells, stratigraphic and core tests.

(2) Alaska (offshore federal waters), Atlantic Coast and Pacific Coast were mapped and released by the Bureau of Land Managemen
as of January 1, 1979.

Source: American Petroleum Institute and the American Association of Petroleum Geologists.

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1982 Explor-atory	1982 Develop-ment	1982 Total(1)	1983 Explor-atory	1983 Develop-ment	1983 Total(1)	1984 Explor-atory	1984 Develop-ment	1984 Total(1)
Alabama	79	133	214	84	133	217	121	262	383
Alaska	10	200	227	3	157	163	10	165	186
Offshore*	--	8	11	0	6	6	0	2	2
Arizona	7	1	14	11	1	12	2	0	2
Arkansas	128	680	825	154	723	900	133	739	897
Atlantic Coast(3)	7	--	7	1	0	1	3	0	3
California	468	2,107	3,097	195	2,143	2,733	204	3,276	3,898
Offshore*	16	175	231	16	77	103	13	104	132
Colorado	653	1,173	1,832	504	978	1,484	579	1,221	1,806
Florida	12	9	21	13	7	20	12	12	24
Georgia	1	--	1	0	0	0	3	0	3
Idaho	6	--	6	4	0	4	3	0	3
Illinois	695	2,433	3,253	729	2,181	3,035	699	2,194	2,941
Indiana	451	571	1,051	453	534	1,022	404	523	990
Kansas	1,838	6,491	8,561	1,718	5,342	7,256	2,346	4,088	6,550
Kentucky	1,119	2,583	3,804	1,375	2,721	4,232	972	2,781	3,844
Louisiana	801	4,244	5,117	592	4,359	5,048	763	6,001	6,891
Offshore*	157	432	589	114	685	801	197	704	901
Maryland	0	0	0	0	0	0	2	0	2
Michigan	449	435	900	302	457	772	536	568	1,121
Mississippi	268	316	584	252	298	550	282	332	615
Missouri	79	104	305	43	133	243	28	85	260
Montana	275	536	816	181	326	511	251	557	820
Nebraska	197	212	414	187	181	369	180	186	377
Nevada	11	--	13	7	1	8	32	5	37
New Mexico	314	1,733	2,100	192	1,301	1,527	225	1,398	1,668
New York	44	623	668	41	370	413	30	579	609
North Carolina	0	0	0	1	0	1	1	0	1
North Dakota	371	325	696	211	278	489	279	421	700
Ohio	180	4,618	4,814	114	4,150	4,288	106	4,818	4,958
Oklahoma	707	10,660	11,390	567	8,340	8,943	515	8,990	9,579
Oregon	8	0	8	0	0	0	1	0	1
Offshore*	0	0	0	0	0	0	0	0	0
Pennsylvania	165	3,168	3,399	92	2,324	2,465	102	3,358	3,533
South Carolina	0	0	0	0	0	0	1	0	1
South Dakota	33	20	53	34	18	52	16	28	44
Tennessee	413	214	627	328	189	517	164	202	366
Texas	5,077	19,707	25,439	4,525	18,897	24,089	5,111	21,810	27,696
Offshore*	141	99	240	109	53	162	111	78	189
Utah	149	313	482	132	283	415	112	380	493
Virginia	26	71	97	14	21	35	3	64	67
Washington	5	0	8	1	0	5	1	0	7
Offshore*	0	0	0	0	0	0	0	0	0
West Virginia	156	1,921	2,114	60	1,536	1,619	37	1,846	1,919
Wyoming	537	1,124	1,719	473	997	1,508	607	1,142	1,804
N. Gulf of Mexico(2)	22	26	48	13	42	55	57	26	83
Pacific Coast(3)	4	0	4	22	0	22	12	0	12
Alaska(3)	1	0	1	0	0	0	2	0	2
Total	15,766	66,751	84,729	13,627	59,421	75,032	14,949	68,057	85,196

* Included in state total.
(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute, Quarterly Completion Reports.

Section III
Table 15f

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1985 Exploratory	1985 Development	1985 Total(1)	1986 Exploratory	1986 Development	1986 Total(1)	1987 Exploratory	1987 Development	1987 Total(1)
Alabama	143	217	360	77	143	220	68	118	186
Alaska	5	98	104	2	176	184	3	87	93
Offshore*	0	6	6	0	8	8	0	3	5
Arizona	2	1	3	6	0	6	4	0	4
Arkansas	122	875	1,018	85	399	484	90	321	411
California	201	3,122	3,599	142	1,993	2,252	159	2,157	2,460
Offshore*	4	84	92	0	41	41	6	36	42
Colorado	563	966	1,551	285	742	1,029	256	625	885
Florida	10	11	21	6	8	14	4	5	9
Georgia	1	0	1	2	0	2	1	0	1
Idaho	3	0	3	4	0	4	4	0	1
Illinois	537	1,840	2,381	307	1,021	1,343	224	971	1,293
Indiana	403	540	972	152	272	443	143	178	335
Iowa	1	0	1	3	0	3	1	0	1
Kansas	1,503	3,986	5,584	1,110	2,029	3,146	1,250	1,950	3,206
Kentucky	635	1,976	2,643	196	814	1,016	113	611	739
Louisiana	621	4,754	5,450	427	2,238	2,669	350	1,985	2,335
Offshore*	165	481	647	146	344	493	125	308	433
Maryland	0	0	0	1	0	1	1	0	1
Michigan	454	394	863	259	265	541	274	251	535
Mississippi	260	312	572	109	185	295	118	198	317
Missouri	15	62	84	5	5	10	6	12	18
Montana	222	385	609	143	205	348	99	188	298
Nebraska	160	114	277	85	55	156	126	65	202
Nevada	25	9	34	20	0	20	13	2	15
New Mexico	288	1,434	1,743	157	760	934	156	623	797
New York	18	418	436	11	246	257	9	208	217
North Dakota	219	278	497	126	93	219	98	87	185
Ohio	84	3,652	3,743	31	1,906	1,946	38	1,622	1,660
Oklahoma	406	7,133	7,617	219	4,315	4,570	239	3,474	3,771
Oregon	3	2	5	8	2	10	6	4	10
Offshore*	0	0	0	0	0	0	0	0	0
Pennsylvania	60	2,718	2,806	24	1,234	1,258	21	1,068	1,090
South Dakota	16	31	49	17	0	17	9	6	15
Tennessee	117	120	237	57	125	182	29	124	153
Texas	4,174	19,225	24,291	2,520	10,253	13,253	2,216	8,581	11,162
Offshore*	118	98	216	50	52	102	55	40	95
Utah	54	302	359	37	159	198	47	72	122
Virginia	3	85	88	7	132	139	2	18	20
Washington	2	2	4	0	0	0	1	0	1
West Virginia	35	1,393	1,432	15	872	887	21	826	847
Wyoming	552	918	1,533	363	452	830	326	438	797
N. Gulf of Mexico	95	29	124	61	49	110	43	28	69
Pacific Coast	4	0	4	4	4	8	0	6	6
Alaska	10	0	10	4	2	6	0	1	1
TOTAL	12,026	57,402	71,108	7,087	31,154	39,010	6,566	26,908	34,269

* Included in state total.
(1) Includes service wells, stratigraphic and core tests.

Source: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1987.

Section III
Table 15g

UNITED STATES TOTAL WELLS REPORTED AS COMPLETED BY STATE

STATE/AREA	1988 Explor-atory	Develop-ment	Total(1)
Alabama	100	97	197
Alaska	3	84	92
Offshore*	0	3	3
Arizona	1	0	1
Arkansas	55	314	369
California	97	1,538	1,819
Offshore*	3	30	34
Colorado	243	594	837
Florida	6	2	8
Georgia	2	0	2
Idaho	2	0	2
Illinois	180	661	937
Indiana	84	95	186
Iowa	1	0	1
Kansas	957	1,477	2,435
Kentucky	74	332	409
Louisiana	301	1,450	1,752
Offshore*	149	191	340
Maryland	1	1	2
Michigan	224	290	517
Mississippi	131	191	322
Missouri	7	2	9
Montana	124	189	319
Nebraska	83	37	121
Nevada	13	2	15
New Mexico	104	635	748
New York	5	86	91
North Dakota	114	105	220
Ohio	13	472	485
Oklahoma	201	2,390	2,629
Oregon	11	4	18
Offshore*	0	0	0
Pennsylvania	21	457	478
South Dakota	6	5	11
Tennessee	8	61	69
Texas	1,780	6,681	8,776
Offshore*	81	29	110
Utah	36	66	102
Virginia	4	21	25
Washington	3	0	3
West Virginia	5	493	498
Wyoming	277	293	585
N. Gulf of Mexico	68	22	90
Pacific Coast	1	5	6
Alaska	0	0	0
TOTAL	5,346	19,152	25,186

* Included in state total.
(1) Includes service wells and stratigraphis and cores tests.

Source: American Petroleum Institute, Quarterly Completion Report, Fourth Quarter 1988.

U.S. ROTARY RIG CENSUS

Year	Number of Rigs	Contractor Owned	Oil Company Owned	Stacked	Active	DRILLING DEPTH CAPABILITIES (Thousand Feet) 0-5	6-9	10-12	13-15	16-Over	Total Land Rigs	Drilling Barges	Offshore Rigs
1967(1)	2,408	2,359	49	835	1,573	623	776	435	199	375	2,114	121	173
1968	2,111	2,067	44	603	1,508	493	680	381	185	372	1,825	114	172
1969	2,060	2,033	27	411	1,649	528	626	352	188	366	1,827	98	135
1970	1,898	1,869	29	567	1,331	434	580	322	219	343	1,662	106	130
1971	1,859	1,832	27	551	1,308	436	535	329	198	361	1,592	124	143
1972	1,768	1,741	27	387	1,381	409	490	301	171	397	1,551	77	140
1973	1,767	1,739	28	294	1,473	355	517	318	164	413	1,570	71	126
1974	1,894	1,881	13	125	1,769	387	529	339	214	425	1,715	66	113
1975	2,028	2,015	14	151	1,877	396	579	380	225	558	1,839	74	115
1976	2,204	2,180	24	225	1,979	468	633	366	239	498	1,964	76	164
1977	2,482	2,451	31	83	2,399	542	628	461	274	577	2,186	77	219
1978	2,851	2,818	33	66	2,785	557	723	565	313	693	2,524	91	236
1979	3,182	3,144	38	308	2,874	546	783	631	350	872	2,802	109	271
1980	3,672	3,626	46	130	3,542	605	885	704	419	1,059	3,255	115	302
1981	4,803	4,762	41	100	4,703	773	1,080	950	595	1,405	4,316	161	326
1982	5,644	5,606	38	2,419	3,225	821	1,285	1,104	717	1,717	5,139	157	348
1983	5,273	5,241	32	2,734	2,539	746	1,233	993	662	1,639	4,832	128	313
1984	4,580	4,553	27	1,490	3,090	571	1,077	933	591	1,408	4,102	131	347
1985	4,409	4,386	23	1,784	2,625	529	1,084	894	570	1,332	3,940	121	348
1986	3,993	3,961	32	2,941	1,052	517	971	789	496	1,220	3,573	90	330
1987	3,331	3,299	32	1,943	1,388	435	841	637	427	991	2,956	91	284
1988	2,752	2,716	36	1,220	1,532	336	751	529	365	771	2,429	63	260

(1) Data for prior years not available on a comparable basis.

Source: Reed Tool Company, Annual Rotary Rig Census (taken in August of each year and published in the October issue of World Oil Magazine).

Section III
Table 17

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	--	--	--	--	--	--	--	--	--	--	--	--	4	4
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	2	2
Arizona	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Arkansas	160	165	168	179	190	200	230	240	240	255	260	300	320	370
California	350	365	395	440	360	380	420	460	470	465	500	535	569	652
Colorado	20	30	30	36	35	40	55	75	100	150	240	250	318	466
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	100	100	100	90	50	40	25	25	30	40	40	35	35	45
Indiana	830	800	750	750	650	600	450	425	400	405	410	380	350	350
Kansas	2,700	3,000	3,300	3,700	4,000	4,270	4,600	4,800	5,100	5,450	5,650	6,000	5,700	6,003
Kentucky	3,350	3,480	3,610	3,500	3,570	3,800	3,900	4,000	4,100	4,200	4,300	4,330	4,690	4,829
Louisiana	2,100	2,210	2,400	2,550	2,690	2,900	3,200	3,500	3,600	4,000	4,300	4,500	5,000	6,479
Maryland	--	--	--	--	--	--	--	--	--	--	--	--	38	38
Michigan	760	700	650	550	400	380	280	250	260	260	270	270	230	154
Mississippi	60	75	75	140	190	220	220	235	230	235	238	250	300	400
Missouri	100	100	90	59	30	20	27	37	32	33	38	40	--	9
Montana	700	760	800	820	830	920	1,000	1,050	1,060	1,065	1,090	1,090	1,176	999
Nebraska	--	--	--	--	--	--	--	--	--	--	--	--	50	53
New Mexico	220	230	270	360	570	920	1,500	1,800	2,200	2,830	3,300	4,000	5,000	6,047
New York	1,700	1,600	1,400	1,400	1,380	1,360	1,300	1,250	1,180	1,160	1,150	980	920	1,000
North Dakota	--	--	--	--	--	--	--	--	--	--	--	--	28	28
Ohio	7,190	7,000	6,700	6,800	6,300	6,000	6,100	6,100	6,200	6,300	6,450	6,300	6,700	7,063
Oklahoma	3,250	3,400	3,500	3,600	3,600	3,700	3,900	4,000	4,200	4,300	4,450	5,000	5,300	5,800
Pennsylvania	19,100	18,800	18,400	18,500	17,700	16,700	16,700	16,500	16,300	16,250	16,300	16,300	16,500	16,350
South Dakota	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tennessee(1)	--	18	18	18	20	20	27	28	28	28	30	30	25	30
Texas	5,000	5,100	5,800	7,300	8,300	9,200	10,200	11,200	11,400	12,240	13,400	15,340	16,750	18,612
Utah	--	--	--	--	--	--	--	--	--	--	--	--	37	35
Virginia	--	--	--	--	--	--	--	--	--	--	--	--	53	92
West Virginia	15,800	16,100	15,500	13,900	14,000	13,500	13,800	13,900	14,000	14,200	14,200	14,000	12,740	14,500
Wyoming	150	145	150	165	165	180	180	200	220	265	280	300	390	350
Other	30	34	40	43	70	100	109	117	125	130	145	170	--	--
Total	63,670	64,212	64,146	64,900	65,100	65,450	68,233	70,192	71,475	74,261	77,041	80,400	83,225	90,761

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(1) Prior to 1948 included with Kentucky.

Source: U.S. Bureau of Mines, Natural Gas Annuals

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Alabama	--	--	2	--	--	--	--	1	1	2	--	15	15	6
Alaska	5	8	10	13	11	19	21	18	44	51	40	50	52	52
Arizona	--	3	7	10	8	9	7	4	4	4	5	4	4	1
Arkansas	485	480	490	515	744	818	909	947	998	1,008	1,013	1,041	876	1,172
California	774	826	879	950	1,033	1,068	1,059	994	897	980	962	1,086	1,095	1,142
Colorado	462	451	501	560	701	826	827	810	805	861	928	934	1,050	1,347
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	74	30	25	25	25	3	3	5	5	8	14	31	36	37
Indiana	300	290	285	280	275	275	271	265	263	50	63	87	106	474
Kansas	6,633	6,915	7,050	7,174	7,200	8,608	8,603	8,509	8,567	8,660	8,585	8,621	8,785	8,800
Kentucky	5,119	5,200	5,210	5,320	6,100	6,020	6,215	6,290	6,413	6,913	7,413	7,099	7,224	7,307
Louisiana	6,990	7,442	7,859	8,260	8,563	8,977	9,036	9,163	9,354	9,690	9,748	9,456	10,551	9,248
Maryland	34	33	33	16	20	8	13	15	13	16	14	16	15	15
Michigan	155	174	175	195	226	250	244	199	211	1,235	1,171	1,317	1,145	503
Mississippi	472	490	450	435	370	376	360	347	322	325	400	252	250	239
Missouri	9	6	6	6	11	11	11	11	11	11	2	3	2	3
Montana	981	954	905	869	784	784	648	1,196	1,098	739	1,056	1,116	1,118	1,450
Nebraska	49	47	44	41	39	37	37	36	35	35	29	29	29	25
New Mexico	6,491	6,967	7,150	7,306	8,010	8,017	8,274	8,754	9,100	8,848	9,388	9,679	9,711	9,915
New York	1,109	1,130	1,130	1,155	1,150	1,164	1,159	1,155	818	600	600	650	789	700
North Dakota	28	29	31	31	31	31	31	19	33	29	29	21	44	34
Ohio	7,077	7,117	7,128	7,160	7,100	3,790	3,865	7,211	7,334	7,789	8,179	8,630	9,406	10,038
Oklahoma	6,218	6,324	6,639	6,813	7,447	7,841	7,726	8,337	8,432	8,168	8,507	8,457	8,868	9,401
Pennsylvania	16,500	16,600	16,600	14,120	17,516	17,808	17,700	17,000	16,600	16,239	16,586	16,600	16,600	17,123
South Dakota	--	--	--	--	--	--	--	--	--	--	--	5	10	20
Tennessee	23	30	30	30	20	20	21	23	26	15	20	45	6	13
Texas	19,831	20,834	22,016	22,995	23,748	23,907	23,760	23,805	23,689	23,417	23,280	23,373	23,805	24,646
Utah	135	121	135	135	148	156	168	165	171	173	176	200	158	114
Virginia	98	98	98	100	99	104	104	111	111	115	115	130	178	174
West Virginia	16,297	17,121	17,500	17,960	19,600	20,830	20,500	18,214	18,600	20,702	21,025	21,324	21,400	21,450
Wyoming	460	547	578	610	701	741	749	787	521	800	840	887	850	900
Total	96,809	100,267	102,966	103,084	111,680	112,498	112,321	114,391	114,476	117,483	120,210	121,158	124,178	126,349

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section III
Table 17b

PRODUCING NATURAL GAS AND CONDENSATE WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	45	66	69	189	250	314	385	489	461	690	863	1,029	1,136
Alaska	61	50	50	52	58	71	79	97	78	81	84	85	85
Arizona	1	1	1	1	1	1	1	1	1	1	1	1	0
Arkansas	1,128	1,223	1,253	1,335	1,402	1,114	1,600	1,959	1,763	2,371	2,623	2,719	2,847
California	1,585	1,123	1,050	1,131	1,117	1,125	1,110	1,352	1,413	1,469	1,566	1,316	1,294
Colorado	1,380	1,500	2,053	2,318	2,574	2,997	3,543	4,008	4,391	4,549	4,401	4,398	4,530
Illinois	41	34	34	51	51	70	70	57	64	81	123	152	169
Indiana	478	563	596	641	655	698	720	736	737	758	1,272	1,289	1,298
Kansas	8,865	9,330	9,375	9,450	10,544	12,820	15,550	13,800	14,100	4,925	15,980	11,485	13,631
Kentucky	7,386	7,505	7,649	7,776	7,883	7,984	8,151	8,219	8,532	8,798	9,285	9,747	10,366
Louisiana	11,359	11,370	12,484	13,333	14,464	16,190	17,048	16,586	16,700	17,124	16,716	15,313	15,890
Maryland	15	14	12	12	12	9	10	8	8	9	7	6	8
Michigan	209	214	212	376	376	423	448	484	414	535	655	651	722
Mississippi	248	257	365	402	433	447	470	596	552	683	710	414	775
Missouri	3	3	7	7	0	0	0	0	0	4	4	9	3
Montana	1,235	1,490	1,438	1,755	1,881	1,881	2,140	2,111	2,133	2,153	2,260	2,799	2,349
Nebraska	19	17	18	22	20	22	25	23	23	23	19	16	20
New Mexico	10,352	10,674	11,812	12,609	13,598	14,571	15,560	16,967	17,547	17,806	18,308	18,647	18,806
New York	900	1,400	1,600	1,900	2,200	2,076	2,636	2,969	3,423	3,500	4,500	4,947	5,167
North Dakota	18	34	34	23	78	80	65	66	51	55	62	61	61
Ohio	10,382	11,509	13,032	14,197	15,827	17,251	19,405	22,112	25,762	28,657	31,343	32,721	33,618
Oklahoma	9,769	10,436	11,570	12,861	14,417	16,419	18,451	20,742	22,230	3,691	24,756	25,762	26,595
Oregon	0	0	0	0	5	5	9	6	8	6	9	14	10
Pennsylvania	17,300	17,500	17,396	18,900	19,800	19,900	21,500	23,000	24,000	25,300	26,500	27,600	27,800
South Dakota	20	20	20	20	10	13	39	38	40	42	44	44	52
Tennessee	5	7	49	75	184	177	255	340	540	780	988	921	840
Texas	26,184	27,762	31,512	33,157	35,650	37,724	40,612	44,130	44,699	45,139	44,320	42,713	43,375
Utah	271	71	535	171	182	200	226	282	322	700	755	594	645
Virginia	186	180	202	227	258	258	288	298	299	425	495	573	689
West Virginia	21,700	22,100	22,600	23,575	24,725	25,900	27,200	27,450	29,675	31,150	32,475	33,400	34,300
Wyoming	950	990	995	888	1,236	1,264	1,243	1,827	1,986	2,148	2,220	2,101	2,147
Total	132,095	137,443	148,018	157,454	169,891	182,004	198,839	210,753	221,952	233,853	243,344	241,527	249,228

(1) Included in other.
(2) Includes offshore wells in state waters only.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Alabama	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	221
Alaska	--	--	--	--	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--	--	--	--	--
Arkansas	3,590	3,670	3,660	3,700	3,800	3,930	4,190	4,410	4,610	5,225	5,680
California	24,420	26,460	24,350	28,080	29,630	30,900	31,920	32,860	34,760	35,990	37,020
Colorado	600	700	750	770	840	1,000	1,220	1,750	1,940	2,150	2,185
Florida	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	11
Illinois	25,670	26,500	27,100	27,500	27,420	27,460	29,520	30,280	29,600	31,400	31,585
Indiana	2,300	2,780	2,950	3,410	3,600	3,840	4,020	4,160	4,080	4,405	4,515
Kansas	27,500	27,900	29,600	31,000	32,460	33,620	35,420	37,755	36,177	37,570	38,330
Kentucky	14,780	14,750	15,500	15,650	16,900	16,950	16,600	16,900	17,800	18,660	18,260
Louisiana	8,700	9,770	10,890	11,860	12,490	13,290	14,220	15,980	18,800	20,905	21,945
Michigan	3,540	3,550	3,820	3,950	3,800	3,980	4,000	4,173	4,034	4,191	3,995
Mississippi	1,120	1,320	1,400	1,670	1,760	1,870	1,950	2,173	2,339	2,374	2,313
Missouri	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	107
Montana	2,890	3,100	3,180	3,300	3,380	3,510	3,410	3,415	3,414	3,584	3,792
Nebraska	60	50	60	140	260	303	350	550	790	825	1,030
Nevada	--	--	--	--	--	--	(1)	--	--	--	2
New Mexico	5,000	5,370	5,580	6,020	6,350	6,790	7,320	7,760	8,640	9,415	10,820
New York	22,500	23,100	23,000	23,200	23,200	22,950	22,730	22,390	20,100	19,670	19,695
North Dakota	--	--	--	(1)	(1)	83	257	460	570	789	920
Ohio	19,500	20,000	19,900	18,580	17,650	17,600	15,670	14,110	14,195	14,385	14,490
Oklahoma	52,200	53,000	54,400	56,800	57,600	60,320	63,400	65,390	69,930	70,075	74,425
Pennsylvania	83,600	82,000	82,100	81,190	78,800	80,600	79,430	73,700	72,525	71,080	69,610
South Dakota	--	--	--	--	--	--	(1)	(1)	(1)	(1)	3
Tennessee	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	35
Texas	107,600	113,100	119,900	128,500	134,670	139,530	143,990	153,190	159,880	178,095	187,935
Utah	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	225
Virginia	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	4
West Virginia	16,250	16,000	15,400	15,000	14,500	13,900	13,460	12,900	12,500	12,770	12,715
Wyoming	4,320	4,600	4,950	5,320	5,610	5,800	5,530	6,530	6,960	7,190	7,405
Other	140	160	190	230	270	297	333	364	366	422	--
Total	426,280	437,880	448,680	465,870	474,990	488,520	498,940	511,200	524,010	551,170	569,273

(1) Included in Other.

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section III
Table 18a

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Ala.	281	334	380	418	449	502	519	518	524	532	546	550
Ak.	2	5	17	45	52	54	56	57	72	94	163	183
Ariz.	1	2	3	5	4	9	8	10	6	20	22	29
Ark.	5,715	6,155	6,381	6,330	5,918	6,010	6,018	6,014	6,372	6,459	6,445	6,118
Ca.	36,285	36,915	37,771	38,184	39,265	40,233	40,916	41,031	41,348	41,608	41,360	40,997
Co.	2,195	2,089	2,021	2,023	2,110	2,030	1,981	1,938	2,371	1,730	1,825	1,811
Fla.	11	11	11	11	11	12	19	38	42	41	44	45
Ill.	31,775	31,826	31,995	31,911	30,174	30,149	29,500	29,017	28,608	27,887	27,236	26,733
Ind.	4,865	5,050	5,176	5,679	5,607	5,951	5,381	5,275	5,300	4,831	4,330	4,094
Kn.	37,880	40,175	40,460	40,933	46,750	46,951	46,715	47,354	46,016	47,597	45,145	44,665
Ky.	18,965	21,165	20,571	19,857	19,443	14,903	15,226	15,600	14,800	13,255	12,311	11,843
La.	23,070	23,468	24,682	24,740	26,382	27,638	29,452	30,179	31,063	30,670	30,266	29,393
Mich.	3,895	4,130	4,348	4,301	4,282	4,234	4,151	4,036	4,141	4,004	4,273	3,878
Miss.	2,240	2,403	3,086	2,819	2,560	2,682	2,580	2,513	2,549	2,557	2,599	2,548
Mo.	127	121	120	116	105	105	100	142	150	146	128	164
Mt.	3,916	3,888	3,707	3,342	3,692	3,642	3,329	3,799	3,507	3,390	3,385	3,331
Nebr.	1,190	1,461	1,571	1,860	1,764	1,726	1,711	1,611	1,511	1,430	1,403	1,305
Nev.	2	2	2	4	4	4	5	9	10	13	13	11
N.M.	12,045	12,045	14,286	15,295	16,102	16,796	17,570	18,000	16,504	16,745	16,903	17,088
N.Y.	19,530	19,230	18,579	17,829	13,537	13,431	12,526	12,304	11,832	4,712	4,201	5,263
N.D.	1,150	1,390	1,451	1,683	1,794	1,824	1,881	1,983	2,017	2,063	2,075	1,987
Ohio	15,200	16,934	16,743	16,682	16,867	14,605	13,752	13,947	14,192	14,638	15,480	15,737
Ok.	75,210	75,630	77,720	79,387	80,799	81,475	80,511	80,947	80,583	80,970	81,052	80,952
Pa.	68,485	68,450	66,260	63,576	59,673	54,062	53,065	52,731	50,645	45,426	42,500	37,625
S.D.	4	14	19	19	19	24	24	28	29	28	27	26
Tenn.	35	34	27	30	40	39	38	33	32	33	32	35
Tx.	189,960	188,934	192,934	196,396	197,659	198,070	199,119	197,924	196,308	192,001	187,922	183,141
Utah	519	697	796	795	852	835	840	841	867	869	875	843
Va.	6	7	5	5	5	6	8	6	2	4	5	5
W.Va.	12,815	12,780	12,560	12,762	12,880	13,044	13,205	13,225	13,467	12,989	13,049	12,849
Wyo.	7,530	7,090	7,475	7,880	7,581	7,611	8,019	8,093	8,434	8,547	8,305	8,978
Other	1	1	1	--	--	--	--	--	--	--	--	--
Tot.	574,905	583,141	591,158	594,917	596,385	588,657	588,225	589,203	583,302	565,289	553,920	542,227

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section III
Table 18b

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Alabama	562	556	544	586	582	608	633	631	648	660	684	692
Alaska	202	173	193	192	199	205	181	298	348	396	443	700
Arizona	28	30	28	28	25	28	27	29	34	35	31	35
Arkansas	7,082	7,110	7,157	7,232	7,235	7,308	7,529	7,756	7,866	8,115	8,104	8,249
California	40,437	39,668	39,254	38,626	40,479	41,029	42,534	43,525	43,375	43,838	45,086	47,362
Colorado	1,770	1,785	1,897	2,004	2,174	2,450	2,827	3,027	3,260	3,450	3,490	2,898
Florida	60	78	142	147	136	143	143	140	111	115	121	117
Illinois	26,134	25,361	24,716	24,309	23,630	23,373	23,527	23,752	23,900	24,067	24,871	26,100
Indiana	4,055	3,605	4,379	4,323	4,376	4,798	4,891	5,076	5,296	5,452	5,452	5,715
Kansas	43,490	42,180	41,055	41,520	41,755	41,945	42,240	42,450	42,900	43,200	48,037	42,402
Kentucky	11,659	14,657	14,616	14,416	14,127	13,905	13,970	14,046	14,097	14,172	14,539	14,585
Louisiana	27,934	26,829	27,762	27,869	27,973	27,734	26,274	23,881	24,500	24,767	26,014	25,320
Michigan	4,311	4,046	3,685	3,733	4,201	3,655	3,770	3,903	3,890	3,890	4,900	4,417
Mississippi	3,102	3,109	3,195	2,901	2,254	2,237	2,212	2,806	2,956	3,263	3,676	3,154
Missouri	126	139	137	135	157	163	173	175	167	251	258	421
Montana	3,243	3,145	3,544	3,471	3,103	3,247	3,309	3,330	3,400	3,661	3,618	3,968
Nebraska	1,244	1,191	1,143	1,107	1,127	1,190	1,291	1,382	1,469	1,551	1,693	1,870
Nevada	9	6	6	6	9	6	12	18	16	20	20	(1)
New Mexico	17,314	17,210	17,287	17,099	13,304	13,715	13,939	14,338	17,453	21,526	15,103	16,289
New York	5,861	5,860	5,427	5,200	5,475	4,975	5,100	4,800	5,039	5,100	5,220	5,300
N. Dakota	1,457	1,466	1,401	1,404	1,488	1,994	1,568	1,608	2,305	2,624	2,938	2,570
Ohio	15,860	14,771	15,222	15,236	16,658	16,611	16,761	17,338	18,289	19,596	21,132	22,441
Oklahoma	78,019	75,572	73,745	72,880	71,797	71,576	72,543	73,752	75,308	76,505	81,296	82,639
Penn.	36,801	34,019	32,596	31,539	32,095	32,095	28,805	28,400	27,768	27,925	25,991	26,138
S. Dakota	26	33	29	27	31	38	43	69	85	94	97	120
Tennessee	59	78	73	67	154	172	215	283	311	351	435	489
Texas	177,221	172,696	167,233	159,090	159,702	160,603	160,546	163,746	166,365	169,826	175,673	180,627
Utah	889	870	890	989	1,076	1,323	1,188	1,448	1,291	1,560	1,714	1,543
Virginia	5	1	1	--	3	7	7	4	5	7	8	(1)
W. Virginia	12,750	12,112	12,136	13,600	13,650	13,750	13,800	13,900	14,100	14,250	14,425	14,700
Wyoming	9,280	8,952	8,950	7,642	8,656	9,450	9,052	11,123	10,200	11,128	12,648	11,574
Other	--	--	--	--	--	--	--	0	0	0	0	39
Total	530,990	517,318	508,443	497,378	497,631	500,333	499,110	507,034	516,752	531,395	547,717	557,009(2)

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(1) Included in other.
(2) In 1981, total includes 4,535 producing wells in federal waters.

Source: U.S. Energy Information Administration, Annual Petroleum Statements
1981 -- World Oil, Forecast Review Issue, February issue

PRODUCING OIL WELLS IN THE UNITED STATES BY STATE
(As of December 31)

STATE	1982	1983	1984	1985	1986	1987	1988
Alabama	719	741	759	810	844	875	892
Alaska	760	672	640	977	1,109	1,216	1,305
Arizona	36	34	31	28	NA	23	20
Arkansas	8,629	8,370	9,490	9,700	10,047	8,398	7,865
California	47,231	47,197	48,541	49,874	43,717	45,694	45,819
Colorado	3,113	4,591	5,360	5,457	5,502	5,642	6,286
Florida	123	137	138	149	114	122	109
Illinois	27,600	28,697	30,045	31,100	32,025	32,307	32,262
Indiana	6,047	6,465	6,792	7,164	7,610	7,449	7,449
Kansas	46,189	49,348	49,198	51,888	48,816	48,613	47,484
Kentucky	15,109	15,562	19,980	21,844	22,639	22,974	22,883
Louisiana	22,380	23,276	24,508	26,354	29,921	29,758	27,079
Michigan	4,536	4,913	4,881	5,143	4,885	4,996	4,866
Mississippi	2,640	2,727	2,562	3,468	2,235	2,143	2,050
Missouri	499	552	557	581	450	200	286
Montana	4,311	4,675	4,201	4,196	3,933	4,050	4,128
Nebraska	2,006	2,100	2,095	2,091	1,838	1,852	1,824
Nevada	(1)	(1)	37	45	NA	35	31
New Mexico	16,526	17,409	18,146	18,697	18,409	18,401	17,890
New York	5,320	5,432	4,678	4,811	4,632	4,428	4,245
North Dakota	2,870	3,734	3,404	3,697	3,543	3,474	3,511
Ohio	24,752	26,287	26,878	27,975	29,937	30,013	30,134
Oklahoma	91,745	95,868	99,600	102,342	100,261	101,745	97,685
Pennsylvania	25,285	24,657	20,739	24,000	20,000	14,721	13,255
South Dakota	130	140	138	165	148	149	151
Tennessee	650	693	775	798	806	648	720
Texas	187,626	195,595	203,664	209,040	201,272	198,163	198,008
Utah	1,583	1,634	1,799	1,944	1,858	1,785	1,849
Virginia	(1)	(1)	(1)	28	32	29	29
West Virginia	14,900	15,300	15,475	15,895	15,750	15,850	15,950
Wyoming	11,792	11,349	11,561	12,038	11,879	10,953	11,850
Other	50	55	31	0	0	0	0
Total	580,142(2)	603,290(2)	620,807(2)	646,626(2)	628,690(2)	620,181(2)	612,448(2)

(1) Included in other.
(2) In 1982, total includes 4,985 producing wells in federal waters; in 1983, 4,710; in 1984, 4,104; in 1985, 4,327; in 1986, 4,425; in 1987, 4,487; and in 1988, 4,526.

Source: World Oil Magazine, Forecast Review Issue, February.

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1947		1948		1949		1950		1951		1952	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	0	33	0	33	0	39	0	58	0	75	4	92
Alaska	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	378	2,992	340	3,040	291	3,076	361	3,266	312	3,329	350	3,758
California	2,363	22,792	2,136	24,413	2,373	22,127	2,143	25,963	1,934	27,656	1,866	29,005
Colorado	127	411	113	611	87	662	191	572	135	700	85	886
Florida	4	1	5	3	5	6	1	11	1	11	1	11
Illinois	68	28,405	48	30,261	71	31,169	16	33,113	12	32,873	7	33,727
Indiana	2	2,807	18	3,252	35	3,739	12	3,946	18	4,222	22	4,473
Kansas	85	26,846	143	24,975	62	29,033	73	30,093	45	31,215	58	32,018
Kentucky	0	14,509	0	14,554	0	14,895	5	15,260	36	15,524	0	15,806
Louisiana	3,168	4,516	3,367	5,508	3,320	6,689	3,477	7,667	3,417	8,106	3,591	8,770
Michigan	276	3,356	296	3,131	387	3,268	141	3,577	155	3,730	134	3,858
Mississippi	416	636	495	737	476	886	280	1,168	126	1,466	206	1,504
Missouri	0	36	0	48	0	88	0	46	0	43	0	70
Montana	24	2,455	24	3,140	39	2,865	20	3,086	22	3,188	30	3,286
Nebraska	0	55	0	46	0	62	35	107	27	181	2	221
Nevada	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico	3,636	1,395	3,288	2,004	3,014	2,509	3,232	2,597	3,283	2,768	3,462	3,141
New York	0	23,000	0	23,000	0	23,400	0	23,200	0	23,100	0	23,000
North Dakota	0	0	0	0	0	0	0	0	2	0	68	17
Ohio	50	22,825	65	22,945	60	21,740	50	19,750	50	18,450	40	19,410
Oklahoma	1,485	50,405	1,380	51,731	1,426	52,934	1,740	55,086	1,605	56,715	1,485	58,762
Pennsylvania	0	82,800	0	84,000	0	82,100	0	82,200	0	81,200	0	81,200
South Dakota	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee	0	22	0	29	0	35	0	36	0	34	0	35
Texas	37,070	67,909	37,970	71,673	39,203	76,280	41,949	81,322	44,016	86,293	45,784	90,615
Utah	0	0	2	1	22	0	3	30	4	38	10	51
Virginia	0	12	0	15	0	15	0	15	0	15	0	25
Washington	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia	0	17,000	0	16,200	0	15,900	0	15,200	0	14,600	0	14,200
Wyoming	247	3,905	336	4,222	464	4,452	323	4,887	313	5,292	242	4,614
U.S. Total	49,399	379,123	50,036	389,572	51,335	397,969	54,052	412,256	55,513	420,824	57,447	432,375

Source: World Oil Magazine

Section III
Table 19a

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1953		1954		1955		1956		1957		1958	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	2	110	5	108	11	102	62	97	35	181	27	227
Alaska	0	0	0	0	0	0	0	0	0	0	1	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	336	3,699	270	3,925	410	4,057	382	4,419	246	5,173	232	5,417
California	1,834	29,950	1,770	31,303	1,759	32,571	1,599	34,625	1,496	35,756	1,290	35,170
Colorado	132	1,098	97	1,633	345	1,784	433	1,724	572	1,612	573	1,625
Florida	0	12	0	13	0	11	0	11	0	11	0	11
Illinois	5	34,417	10	35,155	27	36,758	29	37,689	213	37,828	231	38,366
Indiana	9	4,825	3	4,954	23	5,011	19	5,160	300	4,816	173	5,094
Kansas	42	33,272	31	34,523	121	35,452	127	36,986	103	38,466	131	39,133
Kentucky	0	16,234	0	16,593	12	17,008	21	17,681	19	18,238	8	18,982
Louisiana	4,354	8,583	4,937	9,588	5,855	10,817	6,998	11,737	7,991	12,224	8,537	13,176
Michigan	123	3,863	190	3,842	550	3,689	550	3,453	615	3,397	41	4,198
Mississippi	307	1,536	319	1,547	497	1,617	628	1,801	327	2,005	352	2,087
Missouri	0	91	0	89	0	97	0	130	0	120	0	119
Montana	51	3,421	110	3,641	311	3,587	512	3,516	585	3,261	407	3,210
Nebraska	0	302	0	547	31	932	19	1,602	87	1,616	26	1,320
Nevada	0	0	0	1	0	3	0	3	0	2	0	2
New Mexico	3,644	3,606	3,710	3,656	3,502	4,727	3,563	5,424	4,259	5,809	3,972	6,839
New York	0	23,000	0	22,500	0	22,300	0	21,300	0	19,200	0	19,765
North Dakota	179	73	353	88	444	92	458	313	543	395	503	640
Ohio	70	19,400	90	15,210	80	14,660	75	14,745	130	14,700	175	14,850
Oklahoma	2,120	60,956	2,860	64,551	3,180	71,430	2,773	73,019	2,264	75,623	2,771	76,981
Pennsylvania	0	80,500	0	80,000	0	78,500	0	76,500	0	69,700	0	68,050
South Dakota	0	1	0	2	0	3	0	3	0	3	1	3
Tennessee	0	29	0	44	0	25	0	40	0	35	0	31
Texas	45,976	94,884	47,032	100,712	47,669	108,811	48,513	117,473	48,098	125,861	47,897	131,781
Utah	3	66	1	81	2	68	23	87	129	210	307	241
Virginia	0	25	0	25	0	25	0	20	0	0	0	0
Washington	0	0	0	0	0	0	0	0	2	0	1	0
West Virginia	0	13,600	0	13,000	0	12,500	0	12,000	0	12,700	0	12,740
Wyoming	278	4,841	368	5,321	535	5,881	473	5,959	513	6,074	467	6,334
U.S. Total	59,465	442,394	62,156	454,652	65,364	472,318	67,257	487,517	68,527	495,016	68,123	506,392

Source: World Oil Magazine

Section III
Table 19b

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1959		1960		1961		1962		1963		1964	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	29	244	0	380	0	414	0	447	0	499	0	479
Alaska	5	0	18	0	45	0	50	2	48	7	37	17
Arizona	1	0	2	1	0	4	0	13	0	5	0	10
Arkansas	178	5,881	183	5,810	190	6,267	543	5,301	160	5,239	150	5,950
California	1,115	36,101	1,196	36,388	1,033	37,203	1,213	37,980	1,251	39,099	1,270	39,510
Colorado	382	1,701	127	1,892	115	1,864	110	1,865	72	1,888	58	1,832
Florida	0	11	0	11	0	11	0	11	0	12	0	16
Illinois	128	38,736	67	38,239	74	39,381	0	30,196	0	30,114	0	29,319
Indiana	169	5,303	86	5,381	84	5,792	0	5,887	0	5,937	0	5,949
Kansas	243	39,921	312	46,270	270	46,920	275	47,286	278	47,587	300	48,700
Kentucky	19	21,137	13	20,733	15	20,746	0	19,800	0	19,000	0	15,726
Louisiana	9,280	13,805	8,896	14,389	9,420	14,612	10,951	14,691	11,692	16,037	12,401	17,260
Michigan	59	4,332	850	3,704	931	3,413	832	3,538	915	3,188	915	3,660
Mississippi	383	2,236	277	2,347	289	2,408	525	2,035	554	2,139	342	2,238
Missouri	0	95	0	121	0	120	0	111	0	118	0	87
Montana	331	3,375	33	3,478	33	3,404	41	3,659	36	3,552	34	3,960
Nebraska	21	1,473	15	1,627	18	1,967	0	1,855	5	1,769	5	1,733
Nevada	0	2	0	2	0	2	0	2	0	4	0	5
New Mexico	4,530	7,657	5,323	7,261	4,880	8,857	5,324	8,909	4,861	9,003	4,814	9,828
New York	0	19,275	0	19,000	0	18,000	0	13,500	0	13,100	0	12,800
North Dakota	392	988	74	1,343	92	1,453	567	1,015	600	1,206	453	1,428
Ohio	160	14,768	150	14,560	145	14,305	150	14,350	80	14,525	50	13,683
Oklahoma	2,987	78,128	3,147	80,459	3,775	81,048	3,750	77,795	3,840	77,686	3,857	76,602
Pennsylvania	0	67,580	10	65,000	0	61,896	0	56,900	20	55,360	22	53,043
South Dakota	0	11	0	19	0	24	0	18	0	24	0	24
Tennessee	0	30	0	27	0	30	0	30	0	40	0	41
Texas	47,366	138,298	45,722	143,789	44,936	147,587	44,202	149,526	42,218	152,251	40,481	154,088
Utah	346	317	352	404	349	602	320	500	318	520	15	926
Virginia	0	0	0	8	0	8	0	5	0	6	0	6
Washington	1	0	1	0	1	0	0	0	0	0	0	0
West Virginia	0	12,885	0	12,950	0	12,350	0	12,800	0	13,000	0	13,200
Wyoming	489	6,629	413	7,117	408	7,417	400	9,000	455	7,459	450	7,481
U.S. Total	68,614	520,919	67,267	532,710	67,103	538,105	69,253	519,027	67,403	520,374	65,654	519,601

Source: World Oil Magazine

Section III
Table 19c

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

	1965		1966		1967		1968		1969		1970	
State	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	0	530	0	520		529	5	542	7	467	8	468
Alaska	25	35	42	15	70	19	93	86	58	135	41	120
Arizona	6	4	6	4	(1)	(1)	0	(1)	0	0	(1)	(1)
Arkansas	212	5,730	104	5,453	197	6,237	83	5,896	106	6,012	100	6,100
California	1,204	40,323	1,176	40,516	1,026	40,597	1,428	40,103	1,390	39,505	1,350	37,718
Colorado	61	1,771	42	1,649	37	1,773	33	1,782	30	1,748	37	1,733
Florida	2	36	0	41	(1)	(1)	0	(1)	0	0	(1)	(1)
Illinois	0	29,012	20	28,550	0	27,874	0	27,242	0	26,737	0	26,298
Indiana	0	4,149	0	4,149	0	3,637	0	3,621	0	3,646	0	3,607
Kansas	300	46,200	300	40,622	400	45,925	400	44,755	350	44,390	350	44,315
Kentucky	0	15,600	0	16,000	500	13,500	609	13,000	532	13,220	502	14,000
Louisiana	12,982	17,921	12,338	18,546	12,435	18,511	11,018	19,015	10,756	18,861	9,064	19,214
Michigan	890	3,153	800	3,204	77	3,291	686	3,587	551	3,821	677	3,196
Mississippi	354	2,159	362	2,187	348	2,172	328	2,271	303	2,245	290	2,276
Missouri	0	100	0	142	(1)	(1)	0	(1)	0	0	(1)	(1)
Montana	46	3,677	11	3,582	38	3,724	14	3,252	25	3,460	3	3,159
Nebraska	5	1,614	0	1,493	4	1,457	3	1,404	2	1,369	6	1,299
Nevada	0	9	0	10	(1)	(1)	0	(1)	0	0	(1)	(1)
New Mexico	4,682	9,753	3,499	10,798	3,645	10,712	3,277	11,106	3,186	11,152	3,198	11,075
New York	0	11,700	100	12,200	100	12,000	0	11,500	0	9,500	0	5,000
North Dakota	524	1,439	315	1,718	250	1,513	224	1,503	495	1,155	229	1,506
Ohio	60	13,873	50	14,133	50	14,240	60	14,347	80	14,584	60	14,727
Oklahoma	3,800	76,200	4,000	77,477	4,000	76,971	4,000	76,999	4,000	76,947	4,000	74,212
Pennsylvania	18	52,713	75	50,570	50	45,376	50	35,950	50	33,950	70	30,555
South Dakota	0	29	0	29	(1)	(1)	0	(1)	0	0	(1)	(1)
Tennessee	0	42	0	34	(1)	(1)	0	(1)	0	0	(1)	(1)
Texas	39,052	155,618	36,160	155,281	33,060	155,761	31,525	152,452	28,934	149,837	26,199	146,014
Utah	9	852	10	861	15	981	15	881	15	867	23	884
Virginia	0	7	0	2	(1)	(1)	0	(1)	0	0	(1)	(1)
West Virginia	0	13,400	0	13,300	0	14,250	0	14,000	0	13,800	0	13,700
Wyoming	400	7,594	422	8,012	456	8,091	527	8,396	687	8,386	700	8,800
Other	0	0	0	0	3	263	0	263	0	289	21	273
U.S. Total	64,632	515,243	59,832	511,098	57,465	509,404	54,378	493,593	51,557	486,083	46,928	470,249

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(1) Included in other.

Source: World Oil Magazine

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1971		1972		1973		1974		1975		1976	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	14	524	27	499	44	510	35	384	36	530	40	593
Alaska	53	130	58	139	52	140	42	186	36	164	38	152
Arizona	0	29	1	22	1	22	0	28	0	28	0	27
Arkansas	60	7,086	69	7,168	96	6,328	123	6,993	125	6,947	140	7,072
California	1,300	39,298	421	39,865	496	42,847	453	39,777	370	40,569	496	44,287
Colorado	50	1,845	110	1,709	134	1,721	119	1,921	108	2,232	111	2,265
Florida	8	65	68	67	81	64	63	70	72	72	66	78
Illinois	0	25,369	0	24,736	0	24,307	0	23,718	0	23,360	0	23,509
Indiana	0	3,600	0	4,379	0	4,323	0	4,376	0	4,380	0	4,798
Kansas	325	41,960	325	40,730	319	42,181	276	41,480	250	41,695	200	42,050
Kentucky	557	14,100	560	14,056	100	14,316	0	14,129	0	14,231	0	13,970
Louisiana	7,534	18,216	7,388	19,208	6,203	21,666	6,545	21,428	5,979	21,755	6,128	20,272
Michigan	650	3,200	668	3,129	659	3,082	682	3,132	548	3,107	608	3,162
Mississippi	300	2,255	275	2,298	202	2,108	180	2,074	160	2,077	149	2,063
Missouri	0	139	0	138	0	135	0	137	0	157	0	145
Montana	23	3,707	19	3,196	3	3,533	7	3,021	7	3,143	12	3,298
Nebraska	4	1,190	4	1,176	0	1,118	0	1,109	0	1,127	0	1,292
Nevada	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New Mexico	2,388	10,997	2,386	11,048	2,300	11,138	2,143	11,139	2,255	11,395	2,313	11,533
New York	0	5,860	0	5,500	0	5,400	0	5,475	0	4,975	0	5,000
North Dakota	263	1,453	225	1,340	224	1,237	243	1,245	236	1,248	269	1,302
Ohio	50	14,581	295	14,491	304	14,847	302	14,847	288	14,877	310	15,143
Oklahoma	4,000	71,549	4,000	69,807	3,943	69,082	3,879	67,969	4,089	67,568	4,131	68,257
Pennsylvania	70	29,731	80	26,949	75	32,521	75	30,825	50	32,200	65	32,000
South Dakota	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tennessee	12	59	16	40	6	61	31	56	55	94	75	122
Texas	24,305	149,902	22,680	148,689	19,998	139,314	20,063	40,011	18,584	152,462	16,997	143,678
Utah	46	828	87	812	82	1,362	230	989	121	935	100	1,088
Virginia	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Washington	0	(1)	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
West Virginia	0	13,500	0	13,530	0	13,600	0	13,650	0	13,750	0	13,800
Wyoming	650	8,600	600	8,350	535	7,107	606	8,050	662	8,788	720	9,307
Other	0	36	0	72	10	31	9	28	9	28	1	17
U.S. Total	42,662	469,809	40,362	463,143	35,867	464,101	36,105	458,247	34,040	473,900	32,969	470,299

(1) Included in other.

Source: World Oil Magazine

Section III
Table 19e

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1977		1978		1979		1980		1981		1982	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	40	597	55	575	57	457	57	612	103	589	122	597
Alaska	135	156	188	178	240	160	412	230	296	404	330	430
Arizona	0	28	0	31	0	35	0	32	0	35	0	36
Arkansas	155	7,348	197	7,356	202	7,496	140	7,964	156	8,093	173	8,456
California	481	42,973	517	44,482	1,635	43,039	1,667	43,924	1,592	45,770	1,470	45,761
Colorado	213	2,832	226	3,001	183	3,219	188	3,302	151	2,747	218	2,895
Florida	144	0	50	65	43	72	40	80	42	75	50	73
Illinois	0	23,828	0	23,869	0	24,067	0	24,745	0	26,100	0	27,600
Indiana	0	4,891	0	5,076	0	5,296	0	5,452	0	5,715	0	6,047
Kansas	200	42,250	204	43,054	223	47,156	60	47,397	42	42,360	46	46,143
Kentucky	0	14,046	0	14,149	0	14,097	0	14,517	0	14,585	0	15,109
Louisiana	2,228	21,653	2,244	22,256	4,251	20,516	4,226	21,788	3,871	21,449	2,001	20,379
Michigan	603	3,300	547	3,343	547	3,343	585	3,524	631	3,786	636	3,900
Mississippi	152	2,108	88	2,166	91	2,465	120	2,511	144	3,010	132	2,508
Missouri	0	161	0	161	0	188	20	238	0	421	0	499
Montana	70	3,284	328	2,947	375	3,198	325	3,303	375	3,593	350	3,961
Nebraska	0	1,369	0	1,455	0	1,535	4	1,675	0	1,870	0	2,006
Nevada	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
New Mexico	2,405	11,860	2,144	12,254	2,723	12,322	2,565	13,181	2,986	13,303	3,068	13,458
New York	0	4,800	0	4,900	0	4,800	0	5,000	0	5,300	0	5,320
North Dakota	297	1,341	358	1,374	404	1,504	554	1,736	622	1,946	800	2,070
Ohio	347	17,016	362	17,735	384	18,793	409	20,042	447	21,994	470	24,282
Oklahoma	4,203	69,450	4,247	70,623	4,345	72,160	4,332	74,131	4,563	78,076	5,046	86,699
Pennsylvania	50	28,755	50	28,350	56	27,712	56	27,869	52	26,086	52	25,233
South Dakota	(1)	(1)	0	(1)	3	85	3	115	0	120	0	130
Tennessee	115	157	119	160	144	194	106	335	117	372	120	530
Texas	16,168	147,647	16,109	149,708	16,665	151,458	16,751	157,940	17,351	163,276	16,170	171,456
U.S. Federal Waters	2,702	829	2,624	805	915	2,344	917	2,349	3,267	1,268	3,589	1,396
Utah	369	494	552	739	576	770	436	1,042	419	1,124	396	1,187
Virginia	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
Washington	(1)	(1)	0	(1)	0	(1)	0	(1)	0	(1)	0	(1)
West Virginia	0	13,900	0	14,100	0	14,225	0	14,425	0	14,700	0	14,900
Wyoming	725	9,378	718	9,293	724	9,335	736	9,491	833	10,741	825	10,967
Other	13	74	0	106	0	28	0	31	0	39	1	49
U.S. Total	31,815	476,525	31,927	484,311	34,786	492,069	34,529	508,981	38,060	518,949	36,065	544,077

(1) Included in other.

Source: World Oil Magazine

Section III
Table 19f

PRODUCING OIL WELLS BY STATE AND BY TYPE
(As of December 31)

State	1983		1984		1985		1986		1987	
	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift	Flowing	Artificial Lift
Alabama	102	639	50	709	91	719	102	742	68	807
Alaska	406	266	370	270	481	496	591	518	621	595
Arizona	0	34	0	31	0	28	0	24	0	23
Arkansas	168	8,202	189	9,301	195	9,505	201	9,486	185	8,213
California	1,482	45,715	1,423	47,118	1,455	48,419	1,419	42,298	1,210	44,484
Colorado	304	4,287	571	4,789	491	4,966	490	5,012	491	5,151
Florida	62	75	57	81	67	82	46	68	57	65
Illinois	0	28,967	0	28,920	0	31,100	0	32,025	0	32,307
Indiana	0	6,465	0	6,792	0	7,164	0	7,610	0	7,449
Kansas	53	49,295	49	49,149	75	51,813	73	48,743	70	47,981
Kentucky	0	15,562	0	19,980	0	21,844	0	22,639	0	22,974
Louisiana	2,110	21,266	2,168	22,340	2,285	23,538	2,205	22,430	2,356	27,402
Michigan	663	4,250	749	4,132	600	4,525	635	4,250	652	4,344
Mississippi	135	2,592	259	2,303	116	3,352	179	2,056	188	1,955
Missouri	0	552	0	557	0	581	0	450	0	200
Montana	400	4,275	424	4,292	378	3,818	362	3,571	364	3,686
Nebraska	0	2,100	0	2,095	0	2,091	0	1,838	0	1,852
Nevada	0	(1)	(1)	(1)	4	41	6	23	3	32
New Mexico	3,161	14,248	3,030	14,843	3,444	15,253	3,403	15,006	3,460	14,941
New York	7	5,425	28	4,650	20	4,791	10	4,622	10	4,481
North Dakota	717	3,017	830	2,574	927	2,770	641	2,902	599	2,875
Ohio	523	25,764	535	26,343	556	27,419	386	29,551	387	29,626
Oklahoma	4,794	91,074	4,980	94,620	5,150	97,850	5,013	95,248	5,087	96,658
Pennsylvania	47	24,610	0	20,739	0	24,000	0	20,000	0	14,271
South Dakota	0	140	0	138	0	165	0	148	0	149
Tennessee	126	567	139	636	137	661	0	806	0	648
Texas	15,182	180,413	15,216	188,448	16,247	192,793	14,147	187,125	13,220	184,943
U.S. Federal Waters	1,370	3,340	3,590	514	3,726	601	4,083	342	2,689	1,798
Utah	388	1,246	360	1,439	389	1,555	372	1,486	365	1,420
Virginia	0	(1)	(1)	(1)	(1)	(1)	0	32	0	29
Washington	0	(1)	(1)	(1)	(1)	(1)	0	0	0	0
West Virginia	0	15,300	0	15,475	0	15,895	0	15,759	0	15,850
Wyoming	794	10,555	809	10,752	831	11,207	784	11,095	788	10,165
Other	0	55	5	63	0	28	0	0	0	0
U.S. Total	32,994	570,296	36,104	584,093	37,665	609,070	35,148	588,256	32,870	587,311

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(1) Included in other.

Source: World Oil Magazine, February issue.

PRODUCING OIL WELLS BY STATE AND TYPE
(As of December 31)

State	1988	
	Flowing	Artificial Lift
Alabama	91	801
Alaska	654	651
Arizona	0	20
Arkansas	150	7,715
California	1,074	44,745
Colorado	534	5,752
Florida	51	58
Illinois	0	32,262
Indiana	0	7,449
Kansas	65	47,419
Kentucky	0	22,883
Louisiana	2,205	24,874
Michigan	630	4,236
Mississippi	207	1,843
Missouri	0	286
Montana	375	3,753
Nebraska	0	1,824
Nevada	7	31
New Mexico	3,261	14,629
New York	3	4,242
North Dakota	592	2,919
Ohio	389	29,745
Oklahoma	4,886	92,799
Pennsylvania	0	13,255
South Dakota	0	151
Tennessee	0	720
Texas	13,253	184,755
U.S. Federal Waters	2,921	1,605
Utah	346	1,506
Virginia	1	28
Washington	0	0
West Virginia	0	15,590
Wyoming	805	11,045
U.S. Total	32,497	579,951

Source: World Oil Magazine, February issue.

Section III
Table 20

U.S. STRIPPER WELLS BY STATE
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	--	--	14	39	44	75	71	78	69	78	68	73
Arizona	--	2	2	1	4	6	7	7	7	8	10	12
Arkansas	5,997	5,961	6,203	6,201	6,094	6,100	6,025	6,736	6,822	6,767	6,820	5,847
California	21,395	23,753	31,391	31,466	34,559	32,124	29,983	28,328	24,198	25,957	25,400	26,566
Colorado	740	774	807	867	818	881	942	990	1,016	1,074	1,143	1,255
Illinois	26,095	25,202	24,363	23,960	23,279	23,222	23,275	23,499	23,622	23,860	24,501	25,472
Indiana	7,246	6,995	7,570	4,251	3,962	4,654	4,853	5,056	5,038	5,092	5,022	5,874
Kansas	40,513	39,552	39,853	40,176	40,105	40,597	41,764	42,273	43,154	44,686	41,876	42,924
Kentucky	14,615	14,585	14,511	14,201	13,914	13,690	13,817	14,046	13,953	14,028	14,075	14,130
Louisiana	12,561	12,316	12,907	12,649	12,808	12,723	13,185	13,189	13,600	12,131	15,889	15,950
Michigan	3,555	3,392	3,389	3,356	3,370	3,330	3,260	3,276	3,331	3,405	3,325	3,057
Mississippi	344	313	211	217	278	310	617	654	657	813	1,523	2,138
Missouri	126	139	137	137	157	163	173	161	144	157	301	440
Montana	1,951	1,311	1,186	1,295	1,338	1,873	1,918	1,945	1,983	1,996	2,082	2,058
Nebraska	437	484	417	526	577	638	812	919	987	1,037	1,223	1,414
New Mexico	9,058	9,143	9,122	9,458	9,991	10,274	10,544	10,956	11,401	11,829	12,519	13,226
New York	5,861	5,522	5,528	5,282	4,828	5,231	4,916	4,913	4,700	5,000	5,220	5,345
North Dakota	679	721	749	635	529	569	655	687	741	782	878	836
Ohio	14,447	14,653	14,863	14,906	15,406	15,482	15,586	16,122	17,006	18,222	19,650	21,982
Oklahoma	55,718	54,712	54,788	57,000	59,817	58,736	53,357	56,239	59,971	64,893	66,128	69,781
Pennsylvania	36,801	34,029	32,596	31,539	32,095	31,661	31,274	28,400	27,768	27,925	25,991	25,285
South Dakota	--	11	12	12	8	9	10	16	11	10	12	23
Tennessee	44	46	41	53	99	133	159	213	265	318	387	398
Texas	85,117	84,950	83,666	82,302	87,412	89,027	91,498	92,887	96,713	98,487	103,594	107,596
Utah	37	44	53	84	74	48	77	74	95	106	125	196
Virginia	3	3	1	0	3	7	7	4	5	7	8	12
West Virginia	13,150	13,270	13,375	13,500	13,600	13,680	13,800	13,875	13,925	14,000	14,150	14,300
Wyoming	2,640	1,811	1,716	1,116	926	2,629	3,148	3,387	3,453	3,642	3,252	3,349
Total	359,130	353,696	359,471	355,229	366,095	367,872	365,733	368,930	374,635	386,310	395,176	409,539

Source: Interstate Oil Compact Commission and National Stripper Well Association.

U.S. STRIPPER WELLS BY STATE
(As of January 1)

State	1983	1984	1985	1986	1987	1988
Alabama	92	95	98	100	124	122
Arizona	14	17	14	14	16	15
Arkansas	5,167	7,218	4,738	4,942	4,416	4,438
California	26,354	26,358	26,650	29,230	29,044	26,988
Colorado	1,354	1,861	1,690	1,798	4,269	5,097
Illinois	26,813	28,566	29,942	30,593	31,649	31,883
Indiana	5,353	5,854	6,134	5,457	5,165*	4,985*
Kansas	44,521	47,592	45,749	48,235	50,182	51,953
Kentucky	14,275	17,000	16,433	17,674	17,992	18,073
Louisiana	12,010	16,500	16,500	16,000	15,500	15,000
Michigan	3,361	3,367	3,500	3,475	3,285*	3,015*
Mississippi	1,923	837	837	811	681*	644
Missouri	530	548	548	429	388	289
Montana	2,243	2,673	3,085	3,376	3,493	3,300
Nebraska	1,585	1,672	1,707	1,716	1,837	1,589
New Mexico	13,882	14,280	14,749	15,199	14,466	14,622
New York	5,259	4,228	4,532	4,448	4,309	4,221
North Dakota	959	922	1,016	1,091	1,106	1,125
Ohio	22,966	24,263	25,129	26,412	28,652	28,908
Oklahoma	73,328	77,729	82,431	83,034	84,425	77,154
Pennsylvania	23,438	21,831	19,540	11,877	14,271	13,255
South Dakota	33	33	30	24	17	27
Tennessee	N.A.	716	689	952	848	853
Texas	111,671	117,178	126,202	130,311	123,796	123,945
Utah	N.A.	217	348	519	853	824
Virginia	20	26	32	30	49	51
West Virginia	14,550	14,900	15,200	15,500	15,800	15,925
Wyoming	4,792	5,020	5,020	5,200	3,996	3,486
Total	416,493	441,501	452,543	458,447	460,429	451,787

* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section III
Table 21

U.S. STRIPPER WELL ABANDONMENTS BY STATE
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	--	--	0	19	1	1	8	2	9	3	14	2
Arizona	--	0	0	0	0	0	0	0	0	0	1	1
Arkansas	76	76	55	73	99	26	19	17	42	8	3	5
California	746	1,197	727	1,042	614	695	563	782	881	824	781	1,146
Colorado	103	105	141	84	99	75	94	57	42	40	31	37
Illinois	903	1,096	1,006	644	1,037	766	574	420	400	354	352	303
Indiana	118	96	108	127	100	154	97	97	44	72	262	201
Kansas	1,595	2,433	1,356	1,173	1,900	1,195	753	605	559	541	481	657
Kentucky	367	345	366	397	523	534	306	220	252	198	77	86
Louisiana	385	506	630	562	349	302	310	226	182	134	59	166
Michigan	91	127	95	102	71	51	31	34	47	42	33	61
Mississippi	24	34	25	16	22	15	21	29	173	113	58	60
Missouri	31	0	0	0	0	13	0	12	17	0	0	3
Montana	889	200	119	29	11	11	7	7	12	29	28	17
Nebraska	47	50	50	72	74	9	10	14	59	17	18	11
New Mexico	856	770	749	691	536	499	443	417	432	448	420	435
New York	629	419	573	544	622	553	442	455	352	117	119	161
North Dakota	3	13	78	5	2	4	4	3	6	5	4	4
Ohio	650	460	369	440	611	446	310	202	171	229	176	164
Oklahoma	2,705	2,273	1,604	1,737	1,869	1,739	881	793	656	623	596	644
Pennsylvania	1,376	3,824	1,632	1,951	346	434	1,421	1,034	899	1,229	809	733
South Dakota	--	0	0	0	4	1	0	1	2	6	3	2
Tennessee	0	0	12	7	6	9	6	5	13	6	7	11
Texas	3,860	4,265	3,682	3,884	4,608	5,716	3,177	3,057	2,599	2,268	1,938	1,948
Utah	3	6	6	25	26	39	47	56	54	62	10	12
Virginia	2	0	0	1	1	0	0	1	0	1	1	0
West Virginia	92	80	38	26	124	114	53	13	10	10	10	14
Wyoming	80	46	62	105	124	77	339	441	467	289	323	331
U.S. TOTAL	15,631	18,421	13,483	13,756	13,779	13,478	9,916	9,000	8,380	7,668	6,614	7,215

Source: Interstate Oil Compact Commission and National Stripper Well Association.

U.S. STRIPPER WELL ABANDONMENTS BY STATE
(As of January 1)

State	1983	1984	1985	1986	1987	1988
Alabama	4	1	3	1	2	7
Arizona	0	1	1	0	0	0
Arkansas	91	39	62	85	110	106
California	886	578	1,126	1,182	614	875
Colorado	N.A.	N.A.	36	94	98	224
Illinois	262	145	629	390	343	533
Indiana	425	428	366	387	392*	411*
Kansas	1,363	1,583	1,505	1,693	1,584	1,521
Kentucky	256	397	393	391	516	772
Louisiana	160	637	852	1,213	1,326*	1,267*
Michigan	N.A.	99	107	115	127*	170*
Mississippi	82	86	96	98	103*	137*
Missouri	61	0	N.A.	0	34	51*
Montana	55	N.A.	430	450	75	140
Nebraska	15	18	36	36	45	39
New Mexico	621	628	644	721	1,761	1,000
New York	249	70	140	226	449*	354
North Dakota	15	24	12	78	50	55
Ohio	226	297	354	612	291	343
Oklahoma	835	1,093	1,491	1,156	1,442	1,779
Pennsylvania	863	880	848	930	955*	996*
South Dakota	3	4	4	0	4	1
Tennessee	N.A.	N.A.	0	N.A.	N.A.	110
Texas	2,920	3,980	4,931	6,015	7,585	6,708
Utah	N.A.	24	22	75	89*	93*
Virginia	0	0	3	2	5*	1
West Virginia	34	20	79	74	24	38
Wyoming	N.A.	N.A.	N.A.	N.A.	1,204	510
U.S. TOTAL	9,426	11,032	14,170	16,024	19,233	18,241

N.A. = Not Available
* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1970	1971	1972	1973	1974	1975	1976	1977	1978
Australia	386	402	398	394	373	361	378	359	375
Brunei-Malaysia	592	537	558	126	519	504	574	648	712
India	200	1,545	1,545	1,500	2,500	1,545	1,548	1,600	1,600
Indonesia	2,136	2,055	2,344	2,567	2,710	3,018	3,162	3,421	3,644
Japan	1,725	2,341	1,078	1,084	1,044	1,009	464	448	542
TOTAL ASIA-PACIFIC	5,200	7,046	6,692	6,479	6,861	7,156	6,645	7,006	7,407
Austria	1,268	1,298	1,270	1,250	1,271	1,291	1,222	1,219	1,250
Netherlands	369	351	319	319	347	368	392	393	416
Norway	--	1	4	4	6	24	29	36	50
United Kingdom	60	55	56	63	57	77	90	135	109
West Germany	3,065	3,078	2,833	2,782	2,699	2,699	2,827	2,933	2,933
TOTAL WESTERN EUROPE	5,243	5,217	4,807	5,869	5,916	5,981	6,109	6,266	5,208
Abu Dhabi	94	98	115	142	160	216	209	232	240
Iran	266	280	313	350	369	425	428	518	551
Iraq	113	122	132	133	156	156	170	200	250
Kuwait	741	692	692	692	692	692	596	586	566
Neutral Zone	450	480	440	362	449	449	476	459	455
Qatar	69	80	84	92	81	88	77	77	95
Saudi Arabia	423	425	535	627	670	711	701	754	875
TOTAL MIDDLE EAST	2,862	2,922	3,108	3,187	3,358	3,919	3,007	4,161	4,307
Algeria	775	497	524	574	826	984	826	801	989
Egypt	332	204	245	261	437	319	376	401	430
Gabon	100	101	114	122	137	184	212	240	211
Libya	1,083	995	763	895	979	851	877	797	817
Nigeria	364	570	774	898	1,088	1,052	1,259	1,374	1,322
TOTAL AFRICA	2,898	2,592	2,672	3,016	3,777	3,699	3,804	3,956	4,160
Mexico	3,127	3,908	3,412	4,345	3,301	3,285	3,382	3,419	4,145
Venezuela	9,364	9,360	11,245	12,461	12,450	10,718	10,720	1,932	11,909
United States	530,990	517,318	508,443	497,378	497,631	500,333	499,110	507,034	516,752
Canada	23,675	22,779	20,911	22,996	21,202	18,573	25,055	26,112	25,800
TOTAL WESTERN HEMIS.	582,649	569,172	558,947	551,543	548,894	546,866	574,224	555,034	575,695
TOTAL FREE WORLD	598,852	586,949	576,226	570,094	568,806	567,621	593,789	576,423	596,777

Source: United States, U.S. Department of Energy
Rest of World, Oil and Gas Journal

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1979	1980	1981	1982	1983	1984	1985	1986
Australia	370	403	399	435	509	545	746	879
Brunei-Malaysia	819	808	788	843	965	1,017	999	1,080
India	1,600	1,600	1,600	1,560	1,560	1,560	2,201	2,201
Indonesia	3,823	3,700	4,077	4,341	4,840	4,840	5,378	5,124
Japan	507	388	382	397	370	348	256	284
TOTAL ASIA-PACIFIC	7,684	7,465	7,843	8,184	8,885	8,992	10,381	10,374
Austria	1,254	1,120	1,164	1,229	1,240	1,243	1,605	1,089
Netherlands	473	480	516	533	623	633	644	663
Norway	50	100	117	131	144	171	178	178
United Kingdom	240	290	361	379	387	535	627	661
West Germany	2,945	2,957	3,004	3,077	3,142	3,136	3,152	3,129
TOTAL WESTERN EUROPE	5,421	5,401	5,708	5,978	6,228	6,922	7,509(1)	7,643(1)
Abu Dhabi	250	341	277	352	222	254	254	392
Iran	547	547	530	530	530	530	361	361
Iraq	250	250	280	280	290	290	NA	NA
Kuwait	590	590	546	530	530	530	572	363
Neutral Zone	423	412	450	445	450	464	493	493
Qatar	95	124	128	125	125	174	174	174
Saudi Arabia	725	733	782	555	555	555	NA	NA
TOTAL MIDDLE EAST	4,381	4,193	4,304	4,639	4,643	4,582	3,797(1)	3,875(1)
Algeria	970	1,000	1,050	1,085	1,090	1,090	NA	NA
Egypt	432	484	450	411	500	617	658	666
Gabon	218	242	250	266	270	270	297	500
Libya	896	886	889	891	905	905	671	661
Nigeria	1,457	1,451	1,491	1,312	1,296	1,177	1,153	1,111
TOTAL AFRICA	4,372	4,522	4,672	4,565	4,860	4,937	3,708(1)	3,838
Mexico	4,200	3,384	3,593	3,605	3,640	NA	3,209	3,737
Venezuela	12,486	5,042	13,610	14,029	11,604	13,512	10,103	10,103
United States	531,395	547,717	557,009	580,142	636,900	615,500	642,000	639,735
Canada	18,323	20,721	33,404	33,907	36,388	39,146	43,480	50,037
TOTAL WESTERN HEMIS.	583,748	594,741	625,056	650,162	708,342	690,169	721,857	727,218
TOTAL FREE WORLD	608,606	616,322	647,583	673,528	732,958	715,602(1)	747,252(1)	752,948(1)

NA Not Available
(1) Total is incomplete because figures for all countries are not available.

Source: United States, 1976-1980: U.S. Department of Energy
1981: World Oil Magazine
Rest of World, Oil and Gas Journal
1983-1986: Oil and Gas Journal

PRODUCING OIL WELLS IN FREE WORLD
(As of July 1)

COUNTRY	1987
Australia	926
Brunei-Malaysia	1,056
India	2,670
Indonesia	6,065
Japan	387
TOTAL ASIA-PACIFIC	12,018
Austria	1,198
Netherlands	478
Norway	215
United Kingdom	787
West Germany	3,088
TOTAL WESTERN EUROPE	7,199(1)
Abu Dhabi	1,001
Iran	361
Iraq	868
Kuwait	363
Neutral Zone	492
Qatar	174
Saudi Arabia	588
TOTAL MIDDLE EAST	6,289
Algeria	840
Egypt	821
Gabon	299
Libya	664
Nigeria	1,522
TOTAL AFRICA	5,296
Mexico	3,768
Venezuela	28,101
United States	613,430
Canada	37,882
TOTAL WESTERN HEMISPHERE	708,710
TOTAL FREE WORLD	739,512(1)

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(1) Totals are incomplete because figures for all countries are not available.

Source: Oil and Gas Journal, "Worldwide Report" issue.

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1859	1	0	1	0	2	1
1860	201	0	39	0	240	202
1861	190	0	57	0	247	392
1862	322	0	63	0	385	713
1863	488	0	107	0	595	987
1864	951	0	181	0	1,132	1,303
1865	899	0	378	0	1,277	1,611
1866	795	0	347	0	1,142	1,885
1867	789	0	467	0	1,256	2,360
1868	862	0	202	0	1,064	2,946
1869	986	0	696	0	1,682	3,737
1870	1,002	0	637	0	1,639	4,363
1871	1,005	0	447	0	1,452	4,987
1872	768	0	398	0	1,166	5,271
1873	948	0	296	0	1,244	5,607
1874	1,002	0	302	0	1,304	5,958
1875	1,890	0	568	0	2,458	6,973
1876	2,631	0	329	0	2,960	8,960
1877	3,298	0	658	0	3,956	11,551
1878	2,660	0	328	0	2,988	13,536
1879	2,669	0	148	0	2,817	15,521
1880	4,022	0	144	0	4,216	18,634
1881	3,694	0	182	0	3,876	21,168
1882	3,092	0	179	0	3,271	22,258
1883	2,655	84	279	0	3,018	22,365
1884	2,094	1	270	0	2,365	21,083
1885	2,572	4	379	0	2,955	20,753
1886	3,340	0	968	0	4,308	20,963
1887	1,637	0	505	0	2,142	19,425
1888	1,750	45	491	0	2,286	18,453
1889	5,445	133	1,119	0	6,697	21,833
1890	7,342	50	1,439	0	8,831	27,341
1891	4,168	49	990	0	5,207	29,480
1892	3,090	3	785	0	3,878	31,059
1893	3,474	3	799	0	4,276	32,339
1894	6,138	18	1,493	0	7,649	36,841
1895	10,838	8	2,404	0	13,250	45,784
1896	11,219	14	2,784	0	14,017	54,319
1897	7,571	7	2,237	0	9,815	57,591
1898	7,058	16	1,823	0	8,897	61,288
1899	11,630	22	2,701	0	14,353	69,673

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1900	13,671	17	3,389	0	17,077	78,745
1901	11,811	10	3,276	0	15,097	85,111
1902	13,019	15	3,440	0	16,474	92,371
1903	15,177	322	3,670	0	19,169	101,182
1904	16,008	449	4,088	0	20,545	110,928
1905	12,601	382	3,583	0	16,566	115,943
1906	14,550	493	3,787	0	18,830	122,590
1907	15,534	555	3,579	0	17,668	133,040
1908	13,210	485	3,214	0	16,909	141,453
1909	13,785	1,048	3,404	0	18,327	146,736
1910	11,018	1,500	2,422	0	14,940	148,619
1911	9,825	1,580	2,363	0	13,768	150,793
1912	12,514	1,811	2,855	0	17,180	155,046
1913	19,101	2,207	4,282	0	25,590	170,774
1914	16,668	2,327	4,142	0	23,137	180,177
1915	9,154	2,022	2,981	0	14,157	181,317
1916	18,777	1,803	4,039	0	24,619	192,108
1917	16,590	1,966	4,851	0	23,407	199,319
1918	17,845	2,229	5,613	0	25,687	207,815
1919	21,052	2,135	5,986	0	29,173	228,084
1920	24,273	2,174	7,364	0	33,911	268,247
1921	14,666	2,111	5,160	0	21,937	274,500
1922	17,333	2,024	5,332	0	24,689	284,880
1923	16,206	2,367	5,865	0	24,438	290,100
1924	14,587	2,257	5,044	0	21,888	299,100
1925	16,559	2,330	6,734	0	25,623	306,100
1926	19,013	2,341	7,965	0	29,319	318,600
1927	14,442	2,491	7,210	0	24,143	323,300
1928	12,526	2,727	7,078	0	22,331	327,800
1929	15,572	2,870	7,914	0	26,356	328,200
1930	11,640	2,866	6,734	0	21,240	331,070
1931	6,788	1,985	3,659	0	12,432	315,850
1932	10,444	1,027	3,569	0	15,040	321,500
1933	8,068	932	3,312	0	12,312	326,850
1934	12,520	1,368	4,309	0	18,197	333,070
1935	14,663	1,401	4,911	445(1)	21,420	340,990
1936	17,800	2,070	5,297	723	25,890	349,450
1937	22,386	2,676	6,560	1,453	33,075	363,030
1938	18,598	2,066	6,141	688	27,493	369,640
1939	17,625	2,198	6,474	1,420	27,717	380,390

(1) Not available prior to 1935.

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

Section III
Table 23b

HISTORICAL NUMBER OF WELLS DRILLED IN U.S. BY TYPE: 1859-1946

Year	Oil	Gas	Dry	Service	Total	Producing Oil Wells at Year-End
1940	19,125	2,352	6,617	1,947	30,041	389,010
1941	19,552	3,007	7,128	2,366	32,053	399,960
1942	10,492	2,068	5,504	1,760	19,824	404,840
1943	9,717	1,782	6,385	1,547	19,431	407,170
1944	13,028	3,067	7,009	2,156	25,260	412,220
1945	14,297	2,898	7,471	2,209	26,875	415,750
1946	15,851	3,090	8,047	2,237	29,225	421,460

Source: Wells drilled--Oil and Gas Journal, "Forecast-Review" issues.
Producing wells--Department of Interior, Bureau of Mines, Mineral Industry Surveys.

SECTION IV. PRODUCTION

Table 1. World Crude Oil Production by Area

Table 2. World Crude Oil Production - Twenty Leading Nations

Table 3. U.S. Stripper Wells and Stripper Well Production

Table 4. U.S. Crude Oil Production by State

Table 5. U.S. Stripper Well Production by State

Table 6. Oil Volume, Value and Revenues Received from Onshore Federal and Indian Lands

Table 7. Twenty Leading Companies--U.S. Crude Oil, Condensate and Natural Gas Liquids Production

Table 8. U.S. Average Crude Oil Production Per Well Per Day By State

Table 9. Historical World Crude Oil Production by Area: 1857-1946

Table 10. Historical U.S. Crude Oil Production by State: 1859-1946

WORLD CRUDE OIL PRODUCTION BY AREA
(Thousands of barrels)

Year	United States(1)	Canada	Latin America	Western Europe	Middle East	Africa	Asia	Total Free World	Communist Nations	Total World
1947	1,856,987	7,692	574,170	12,873	306,320	8,649	24,568	2,791,259	230,880	3,022,139
1948	2,020,185	12,287	633,568	13,114	416,780	13,499	55,878	3,165,311	267,923	3,433,234
1949	1,841,940	21,305	634,560	17,651	511,507	16,135	74,518	3,117,616	286,526	3,404,142
1950	1,973,574	29,044	716,655	25,310	640,862	16,702	86,883	3,489,030	313,997	3,803,027
1951	2,247,711	47,615	804,154	33,696	700,643	16,947	101,218	3,951,984	330,746	4,282,730
1952	2,289,836	61,237	843,522	40,533	760,599	17,561	108,981	4,122,269	408,845	4,531,114
1953	2,357,082	80,899	828,792	47,922	884,736	17,900	121,377	4,338,708	459,347	4,798,055
1954	2,314,988	96,080	893,403	55,101	998,932	15,225	127,637	4,501,366	515,225	5,016,591
1955	2,484,428	129,440	1,000,431	64,625	1,185,519	13,837	138,682	5,016,962	608,697	5,625,659
1956	2,617,283	171,981	1,127,925	72,556	1,260,610	13,224	145,824	5,409,403	715,273	6,124,676
1957	2,616,901	181,848	1,257,309	83,429	1,293,099	18,102	166,631	5,617,319	821,125	6,438,444
1958	2,449,016	165,496	1,214,520	87,345	1,558,351	31,713	169,824	5,676,265	931,485	6,607,750
1959	2,574,590	184,778	1,300,922	94,248	1,684,636	41,943	193,308	6,074,425	1,058,813	7,133,238
1960	2,574,933	189,534	1,365,594	105,494	1,923,285	105,308	202,312	6,466,460	1,208,000	7,674,460
1961	2,621,758	220,861	1,425,418	114,777	2,055,933	178,613	201,992	6,819,352	1,366,861	8,186,213
1962	2,676,189	244,136	1,550,492	122,104	2,257,951	293,384	218,028	7,362,284	1,519,574	8,881,858
1963	2,752,723	257,662	1,583,086	130,085	2,486,348	434,311	221,610	7,865,825	1,672,521	9,538,346
1964	2,786,822	275,364	1,644,429	142,517	2,786,199	623,586	228,802	8,487,719	1,821,925	10,309,644
1965	2,848,514	296,997	1,681,936	146,199	3,053,941	811,692	245,755	9,085,034	1,977,481	11,062,515
1966	3,027,763	320,467	1,670,315	143,921	3,408,361	1,029,674	256,221	9,856,722	2,165,064	12,021,786
1967	3,215,742	351,287	1,783,731	142,864	3,667,393	1,137,566	288,195	10,586,778	2,327,562	12,914,340
1968	3,329,042	435,906	1,835,054	141,073	4,135,044	1,460,968	338,381	11,675,468	2,470,850	14,146,318
1969	3,371,751	410,814	1,865,248	139,369	4,542,994	1,850,355	403,080	12,583,611	2,638,900	15,222,511
1970	3,517,450	461,177	1,916,188	136,626	5,094,380	2,215,237	502,812	13,843,870	2,874,838	16,718,708
1971	3,453,914	491,846	1,866,791	131,862	5,979,115	2,060,359	580,114	14,564,001	3,098,792	17,662,793
1972	3,455,368	560,693	1,787,957	138,479	6,630,500	2,085,873	690,986	15,349,856	3,250,889	18,600,745
1973	3,360,903	648,348	1,894,715	138,513	7,744,933	2,161,473	815,845	16,764,730	3,603,251	20,367,981
1974	3,202,585	616,532	1,788,690	142,005	7,986,831	1,989,898	816,030	16,542,571	3,995,156	20,537,727

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(1) Includes lease condensate

Source: U.S. Department of the Interior, Bureau of Mines-1947-1958: Minerals Yearbook, Annual
1959-1972: International Petroleum Annual
1973-1974: World Crude Oil Production Annual 1974, July 17, 1975

WORLD CRUDE OIL PRODUCTION BY AREA
(Thousands of barrels)

Year	United States(1)	Canada	Latin America	Western Europe	Middle East	Africa	Asia	Total Free World	Communist Nations	Total World
1975	3,056,779	520,666	1,603,333	199,950	7,160,993	1,826,255	806,329	15,174,305	4,328,030	19,502,335
1976	2,976,180	488,680	1,625,069	311,858	8,115,708	2,134,861	922,818	16,575,174	4,616,366	21,191,540
1977	3,009,265	482,021	1,647,362	489,328	8,186,851	2,276,007	1,017,244	17,108,078	4,792,617	21,900,695
1978	3,175,927	483,260	1,736,427	643,149	7,884,927	2,233,791	1,037,520	17,195,001	4,963,250	22,158,251
1979	3,121,310	546,040	1,919,535	828,550	7,868,670	2,423,600	1,051,200	17,758,905	5,118,030	22,876,935
1980	3,146,365	521,184	2,035,692	890,965	6,735,498	2,226,378	1,000,278	16,556,360	5,204,520	21,760,880
1981	3,128,624	469,025	2,182,700	955,570	5,749,480	1,672,065	1,027,110	15,184,574	5,192,125	20,376,699
1982	3,156,715	463,550	2,256,065	1,078,210	4,622,360	1,629,725	955,570	14,162,195	5,184,460	19,346,655
1983	3,170,999	494,940	2,203,505	1,236,620	4,215,750	1,609,650	1,024,555	13,956,019	5,241,400	19,197,419
1984	3,249,696	516,426	2,315,682	1,331,874	4,128,114	1,713,978	1,164,978	14,420,748	5,332,620	19,753,368
1985	3,274,553	531,805	2,284,900	1,369,480	3,761,325	1,772,075	1,142,450	14,136,588	5,352,360	19,488,948
1986	3,168,252	537,280	2,190,000	1,395,030	4,639,150	1,819,890	1,176,760	14,926,362	5,402,730	20,329,092
1987	3,047,378	569,400	2,200,220	1,377,510	4,603,015	1,734,845	1,141,355	14,674,723	5,469,160	20,142,883

(1) Includes lease condensate.

Source: 1975-1978: U.S. Department of Energy, Energy Information Administration, World Crude Oil Production Annual
1979-1987: U.S.--U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual
Rest of World--Central Intelligence Agency, International Energy Statistical Review

Section IV
Table 2

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1974	Nation	1975	Nation	1976
1. U.S.S.R.(1)	3,373,650	1. U.S.S.R.(1)	3,608,850	1. U.S.S.R.(1)	3,822,000
2. United States(1)	3,202,585	2. United States(1)	3,052,048	2. Saudi Arabia(2)	3,053,887
3. Saudi Arabia(2)	2,996,543	3. Saudi Arabia(2)	2,491,834	3. United States(1)	2,976,180
4. Iran	2,197,901	4. Iran	1,952,650	4. Iran	2,168,237
5. Venezuela	1,086,332	5. Venezuela	856,364	5. Venezuela	839,737
6. Kuwait(2)	830,580	6. Iraq	825,521	6. Iraq	834,810
7. Nigeria	823,347	7. Kuwait(2)	670,918	7. Nigeria	756,064
8. Iraq	720,729	8. Nigeria	651,890	8. Libya	704,011
9. Canada	616,532	9. United Arab Emirates	618,310	9. Kuwait(2)	700,000
10. United Arab Emirates	616,485	10. People's Republic of China	571,590	10. United Arab Emirates	692,106
11. Libya	555,291	11. Libya	551,150	11. People's Republic of China	645,897
12. Indonesia	501,838	12. Canada	520,666	12. Indonesia	550,319
13. People's Republic of China	474,500	13. Indonesia	477,055	13. Canada	488,680
14. Algeria	368,139	14. Algeria	350,753	14. Algeria	383,816
15. Mexico(1)	238,271	15. Mexico	294,254	15. Mexico	327,285
16. Qatar	189,348	16. Qatar	159,482	16. Qatar	178,120
17. Argentina	151,110	17. Australia	149,873	17. Australia	152,522
18. Australia	140,396	18. Argentina	144,364	18. Argentina	145,561
19. Romania	107,964	19. Oman	124,600	19. Oman	133,795
20. Oman	106,046	20. Romania	108,739	20. Egypt	120,180
TOTAL FREE WORLD	16,542,571	TOTAL FREE WORLD	15,169,574	TOTAL FREE WORLD	16,575,174
TOTAL WORLD	20,537,727	TOTAL WORLD	19,497,604	TOTAL WORLD	21,191,540

(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: U.S. Energy Information Administration, World Crude Oil Production Annual

Section IV
Table 2a

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

Nation	1977	Nation	1978	Nation	1979
1. U.S.S.R.(1)	3,991,050	1. U.S.S.R.	4,093,475	1. U.S.S.R.	4,187,280
2. Saudi Arabia(2)	3,290,000	2. United States(1)	3,175,927	2. Saudi Arabia	3,376,615
3. United States(1)	3,009,265	3. Saudi Arabia(2)	3,113,470	3. United States(1)	3,114,545
4. Iran	2,080,051	4. Iran	1,900,555	4. Iraq	1,269,105
5. Iraq	909,945	5. Iraq	959,585	5. Iran	1,156,320
6. Venezuela	816,818	6. Venezuela	790,418	6. Venezuela	859,940
7. Nigeria	765,473	7. People's Republic of China	731,825	7. Nigeria	840,230
8. Libya	753,178	8. Libya	727,445	8. Kuwait	807,745
9. United Arab Emirates	729,506	9. Nigeria	697,150	9. People's Republic of China	774,530
10. People's Republic of China	653,350	10. Kuwait(2)	680,725	10. Libya	763,580
11. Kuwait(2)	650,795	11. United Arab Emirates	668,680	11. United Arab Emirates	668,315
12. Indonesia	615,123	12. Indonesia	597,505	12. Indonesia	580,715
13. Canada	482,021	13. Canada(1)	483,260	13. United Kingdom	572,320
14. Algeria	409,864	14. Algeria(1)	447,125	14. Canada(1)	546,040
15. Mexico	358,090	15. Mexico(1)	440,555	15. Mexico(1)	533,265
16. United Kingdom	271,653	16. United Kingdom	394,930	16. Algeria(1)	415,005
17. Qatar	162,316	17. Qatar	176,537	17. Neutral Zone	207,320
18. Argentina	157,248	18. Neutral Zone	170,090	18. Egypt	191,625
19. Australia	157,155	19. Egypt	169,360	19. Brunei-Malaysia	187,975
20. Egypt	150,925	20. Argentina	165,195	20. Qatar	185,420
TOTAL FREE WORLD	17,108,078	TOTAL FREE WORLD	17,195,001	TOTAL FREE WORLD	17,825,515
TOTAL WORLD	21,900,695	TOTAL WORLD	22,158,251	TOTAL WORLD	22,970,545

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(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: 1977-1978-U.S. Energy Information Administration, World Crude Oil Production Annual.
1979-Central Intelligence Agency, International Energy Statistical Review.

Section IV
Table 2b

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

	Nation	1980		Nation	1981		Nation	1982
1.	U.S.S.R.	4,282,200	1.	U.S.S.R.	4,303,350	1.	U.S.S.R.	4,388,760
2.	Saudi Arabia(2)	3,524,946	2.	Saudi Arabia(2)	3,513,125	2.	United States(1)	3,156,715
3.	United States(1)	3,146,502	3.	United States(1)	3,128,780	3.	Saudi Arabia(2)	2,304,975
4.	Iraq	920,124	4.	Mexico(1)	843,880	4.	Mexico	1,086,970
5.	Venezuela	792,390	5.	Venezuela	769,420	5.	Iran	808,110
6.	People's Republic of China	775,188	6.	People's Republic of China	738,760	6.	United Kingdom	772,705
7.	Nigeria	753,228	7.	United Kingdom	661,015	7.	China	740,585
8.	Mexico(1)	708,942	8.	Indonesia	585,640	8.	Venezuela	690,215
9.	Libya	669,780	9.	United Arab Emirates	547,500	9.	Indonesia	488,735
10.	United Arab Emirates	622,932	10.	Nigeria	527,425	10.	Nigeria	472,675
11.	Iran	680,292	11.	Iran	504,065	11.	Canada	452,965
12.	United Kingdom	592,554	12.	Canada(1)	469,025	12.	United Arab Emirates	443,110
13.	Indonesia	576,816	13.	Libya	415,005	13.	Libya	422,670
14.	Canada(1)	521,184	14.	Iraq	362,445	14.	Iraq	354,780
15.	Kuwait(2)	508,374	15.	Kuwait(2)	345,655	15.	Algeria	259,150
16.	Algeria(1)	373,320	16.	Algeria	293,095	16.	Kuwait(2)	244,915
17.	Egypt	217,770	17.	Egypt	218,270	17.	Egypt	242,725
18.	Neutral Zone	199,104	18.	Norway	182,865	18.	Norway	189,070
19.	Norway	193,248	19.	Argentina	181,040	19.	Argentina	176,660
20.	Brunei-Malaysia	189,588	20.	Brunei-Malaysia	156,585	20.	Brunei-Malaysia	167,900
	TOTAL FREE WORLD	16,559,304		TOTAL FREE WORLD	15,181,445		TOTAL FREE WORLD	14,116,160
	TOTAL WORLD	21,765,654		TOTAL WORLD	20,373,570		TOTAL WORLD	19,395,155

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(1) Includes lease condensate.
(2) Excluding Neutral Zone production.

Source: Central Intelligence Agency, International Energy Statistical Review

Section IV
Table 2c

WORLD CRUDE OIL PRODUCTION-TWENTY LEADING NATIONS
(Thousands of barrels)

	Nation	1983		Nation	1984		Nation	1985
1.	U.S.S.R.	4,363,940	1.	U.S.S.R.	4,344,420	1.	U.S.S.R.	4,288,385
2.	United States(1)	3,170,999	2.	United States(1)	3,249,696	2.	United States(1)	3,274,553
3.	Saudi Arabia (2)	1,776,455	3.	Saudi Arabia(2)	1,626,504	3.	Saudi Arabi(2)	1,200,850
4.	Mexico	979,660	4.	Mexico	1,005,036	4.	Mexico	997,545
5.	Iran	909,580	5.	United Kingdom	927,810	5.	United Kingdom	924,545
6.	United Kingdom	839,135	6.	China	834,480	6.	China	911,040
7.	China	769,005	7.	Iran	800,442	7.	Iran	824,170
8.	Venezuela	653,350	8.	Venezuela	663,558	8.	Venezuela	591,665
9.	Canada	529,250	9.	Indonesia	536,556	9.	Nigeria	534,360
10.	Indonesia	505,525	10.	Canada	516,426	10.	Canada	531,805
11.	Nigeria	452,965	11.	Nigeria	509,838	11.	Iraq	524,505
12.	United Arab Emirates	408,070	12.	Iraq	440,298	12.	Indonesia	450,775
13.	Libya	392,740	13.	United Arab Emirates	401,502	13.	United Arab Emirates	418,290
14.	Iraq	336,530	14.	Libya	392,718	14.	Libya	390,185
15.	Kuwait(2)	321,565	15.	Kuwait(2)	333,792	15.	Egypt	319,010
16.	Algeria	255,135	16.	Egypt	302,682	16.	Kuwait(2)	314,630
17.	Egypt	251,485	17.	Norway	256,200	17.	Norway	286,525
18.	Norway	224,110	18.	Algeria	233,508	18.	Algeria	235,425
19.	Brunei-Malaysia	190,895	19.	India	173,248	19.	India	224,475
20.	Argentina	174,835	20.	Australia	180,072	20.	Brazil	211,700
	TOTAL FREE WORLD	13,988,260		TOTAL FREE WORLD	14,420,748		TOTAL FREE WORLD	14,136,588
	TOTAL WORLD	19,274,555		FREE WORLD	19,753,368		TOTAL WORLD	19,488,948

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(1) Includes lease condensate.
(2) Excludes Neutral Zone production.

Source: U.S. - Energy Information Administration, Petroleum Supply Annuals
Rest of World - Central Intelligence Agency, International Energy Statistical Review

WORLD CRUDE OIL PRODUCTION--TWENTY LEADING NATIONS
(Thousands of Barrels)

	Nation	1986
1.	U.S.S.R.	4,290,210
2.	United States(1)	3,168,252
3.	Saudi Arabia(2)	1,795,070
4.	China	953,745
5.	United Kingdom	915,420
6.	Mexico	887,315
7.	Iran	710,290
8.	Iraq	626,340
9.	Venezuela	575,240
10.	Canada	537,280
11.	Nigeria	533,265
12.	Kuwait(2)	490,560
13.	United Arab Emirates	485,815
14.	Indonesia	461,360
15.	Libya	415,005
16.	Norway	306,965
17.	Egypt	296,745
18.	Algeria	244,915
19.	India	228,125
20.	Brazil	209,875
TOTAL FREE WORLD		14,926,362
TOTAL WORLD		20,329,092

	Nation	1987
1.	U.S.S.R.	4,354,450
2.	United States(1)	3,047,378
3.	Saudi Arabia	1,484,455
4.	China	953,745
5.	Mexico	927,465
6.	Iran	894,616
7.	United Kingdom	853,370
8.	Iraq	757,740
9.	Venezuela	573,780
10.	Canada	569,400
11.	United Arab Emirates	530,710
12.	Nigeria	469,390
13.	Indonesia	434,715
14.	Kuwait	377,410
15.	Norway	344,195
16.	Egypt	277,040
17.	Algeria	231,775
18.	India	222,285
19.	Brazil	206,590
20.	Oman	203,305
TOTAL FREE WORLD		14,858,413
TOTAL WORLD		20,345,823

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(1) Includes lease condensate.
(2) Excludes Neutral Zone production.

Source: U.S.--U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.
Rest of World--Central Intelligence Agency, International Energy Statistical Review.

Section IV
Table 3

U.S. STRIPPER WELLS AND STRIPPER WELL PRODUCTION

Year	Number of Stripper Wells (as of Dec. 31)	Total Production from Stripper Wells (000 barrels)	Average Production Per Well (B/D)	Total(1) U.S. Crude Oil Production (000 barrels)	Stripper Percent of Total Production
1947	294,672	279,659	2.6	1,856,987	15.1
1948	310,892	352,899	3.1	2,020,185	17.5
1949	313,970	350,871	3.1	1,841,940	19.0
1950	321,287	375,551	3.2	1,973,574	19.0
1951	320,689	341,241	2.9	2,247,711	15.2
1952	332,058	374,175	3.1	2,289,836	16.3
1953	332,552	383,947	3.2	2,357,082	16.3
1954	340,276	432,496	3.5	2,314,988	18.7
1955	357,931	463,702	3.5	2,484,428	18.7
1956	370,489	485,637	3.6	2,617,283	18.6
1957	372,519	474,919	3.5	2,616,901	18.1
1958	373,870	511,842	3.8	2,449,016	20.9
1959	392,535	533,470	3.7	2,574,590	20.7
1960	403,323	577,151	3.9	2,574,933	22.4
1961	406,102	591,911	4.0	2,621,758	22.6
1962	406,051	579,410	3.9	2,676,189	21.7
1963	401,031	555,130	3.8	2,752,723	20.2
1964	394,107	534,567	3.7	2,786,822	19.9
1965	398,299	589,016	4.0	2,848,514	20.7
1966	380,549	485,166	3.5	3,027,763	16.0
1967	376,851	499,601	3.6	3,215,742	15.5
1968	367,205	485,162	3.6	3,329,042	14.6
1969	358,650	454,820	3.5	3,371,751	13.5
1970	359,130	441,287	3.4	3,517,450	12.5
1971	353,696	423,322	3.6	3,453,914	12.3
1972	359,471	411,925	3.1	3,455,368	11.9
1973	355,229	385,684	3.0	3,360,903	11.5
1974	366,095	411,936	3.1	3,202,585	12.9
1975	367,872	394,163	2.9	3,056,779	12.9
1976	365,733	392,191	2.9	2,976,180	13.2
1977	368,930	392,532	2.9	2,985,360	13.1
1978	374,635	391,633	2.9	3,178,216	12.3
1979	386,310	394,405	2.8	3,121,310	12.6
1980	395,176	401,095	2.8	3,146,519	12.7
1981	409,539	426,502	2.9	3,128,624	13.1
1982	416,493	441,951	2.9	3,156,715	14.0
1983	441,501	462,013	2.9	3,159,440	14.6
1984	452,543	463,459	2.8	3,249,696	14.3

(1) Includes lease condensate

Source: National Stripper Well Survey
Total Crude Oil Production, Department of Energy

U.S. STRIPPER WELLS AND STRIPPER WELL PRODUCTION

Year	Number of Stripper Wells (as of Dec. 31)	Total Production from Stripper Wells (000 barrels)	Average Production Per Well (B/D)	Total(1) U.S. Crude Oil Production (000 barrels)	Stripper Percent of Total Production
1985	458,447	455,884	2.7	3,274,553	13.9
1986	460,426	449,446	2.7	3,168,252	14.5
1987	451,787	446,837	2.7	3,047,378	14.7

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(1) Includes lease condensate.

Source: Stripper Well data from National Stripper Well Association, National Stripper Well Survey.
Total U.S. Crude Oil Production from Department of Energy, Energy Information Administration.

Section IV
Table 4

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Alabama	396	466	462	735	1,020	1,279	1,694	1,584	1,411	3,069
Alaska	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-
Arkansas	29,948	31,682	29,986	31,108	29,798	29,440	29,681	29,130	28,369	29,355
California	333,132	340,074	332,942	327,607	354,561	359,450	365,085	355,865	354,812	350,754
Colorado	15,702	17,862	23,587	23,303	27,823	30,381	36,402	46,206	52,653	58,516
Florida	259	290	441	487	596	591	543	548	495	479
Illinois	66,459	64,808	64,501	62,028	60,243	60,089	59,026	66,798	81,423	82,346
Indiana	6,095	6,974	9,696	10,699	11,100	12,037	12,623	11,204	10,988	11,513
Kansas	105,132	110,908	101,868	107,586	114,522	114,807	114,566	119,317	121,669	124,204
Kentucky	9,397	8,801	8,803	10,381	11,622	11,918	11,518	13,791	15,518	17,628
Louisiana	160,128	181,458	190,826	208,965	232,281	243,929	256,632	246,558	271,010	299,421
Michigan	16,215	16,871	16,517	15,826	13,927	13,251	12,285	12,028	11,266	10,740
Mississippi	34,925	45,761	37,966	38,236	37,039	36,310	35,620	34,240	37,741	40,824
Missouri	55	31	49	32	24	21	39	96	72	65
Montana	8,742	9,382	9,118	8,109	8,958	9,606	11,920	14,195	15,654	21,760
Nebraska	229	215	330	1,547	2,558	2,660	6,344	7,783	11,203	16,204
Nevada	-	-	-	-	-	-	-	33	64	64
New Mexico	40,926	47,969	47,645	47,367	52,719	58,681	70,441	74,820	82,958	87,893
New York	4,762	4,621	4,425	4,143	4,254	4,242	3,800	3,257	2,904	2,748
North Dakota	-	-	-	-	25	1,549	5,183	6,025	11,143	13,495
Ohio	3,108	3,600	3,483	3,383	3,140	3,350	3,610	3,880	4,353	4,785
Oklahoma	141,019	154,455	151,660	164,599	186,869	190,435	202,570	185,851	202,817	215,862
Pennsylvania	12,690	12,667	11,374	11,859	11,345	11,233	10,649	9,107	8,531	8,230
South Dakota	-	-	-	-	-	-	-	37	30	32
Tennessee	8	19	18	12	14	15	16	13	13	9
Texas	820,210	903,498	744,834	829,874	1,010,270	1,022,139	1,019,164	974,275	1,053,297	1,107,808
Utah	-	16	637	1,228	1,305	1,737	1,807	1,905	2,227	2,466
Virginia	61	33	43	21	12	10	8	7	4	4
Washington	-	-	-	-	-	-	-	-	-	-
West Virginia	2,617	2,692	2,839	2,808	2,757	2,602	3,038	2,902	2,320	2,179
Wyoming	44,772	55,032	47,890	61,631	68,929	68,074	82,618	93,533	99,483	104,830
Total(Mb)	1,857.0	2,020.2	1,841.9	1,973.6	2,247.7	2,289.8	2,357.1	2,315.0	2,484.4	2,617.3
Daily Ave(Mb)	5.1	5.5	5.0	5.4	6.2	6.3	6.5	6.3	6.8	7.2

(1) Includes Lease Condensate

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section IV
Table 4a

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Alabama	5,406	5,887	5,524	7,329	6,931	7,473	9,175	8,498	8,064	8,030
Alaska	-	-	187	559	6,327	10,259	10,740	11,059	11,128	14,358
Arizona	-	12	25	73	73	39	68	64	97	132
Arkansas	31,047	28,700	26,329	30,117	29,246	27,649	27,406	26,737	25,930	23,824
California	339,646	313,672	308,946	305,352	299,609	268,590	300,908	300,009	316,428	345,295
Colorado	54,982	48,736	46,440	47,469	46,759	42,477	38,283	34,755	33,511	33,492
Florida	461	449	424	369	374	419	464	620	1,464	1,799
Illinois	77,083	80,275	76,727	77,341	76,818	78,796	74,796	70,168	63,708	61,661
Indiana	12,662	11,864	11,554	12,054	11,500	12,077	11,902	11,283	11,481	10,617
Kansas	123,614	119,942	119,543	113,453	112,241	112,076	109,107	106,252	104,733	103,738
Kentucky	17,029	17,509	27,272	21,147	18,344	17,789	18,344	19,772	19,386	18,066
Louisiana	329,896	313,891	362,666	400,832	424,962	477,153	515,057	549,698	594,853	674,318
Michigan	10,169	9,308	10,439	15,899	18,901	17,114	15,972	15,601	14,728	14,273
Mississippi	38,922	39,512	49,620	51,673	54,688	55,713	58,619	56,777	56,183	65,227
Missouri	65	84	75	75	72	55	53	65	73	97
Montana	27,172	27,957	29,857	30,240	30,906	31,648	30,870	30,647	32,778	35,380
Nebraska	19,586	20,373	22,881	23,825	24,369	24,894	21,846	19,113	17,216	13,850
Nevada	44	40	32	27	154	141	118	255	209	307
New Mexico	94,759	98,515	105,692	107,380	112,553	109,328	109,941	113,863	119,166	124,154
New York	2,677	1,763	1,970	1,813	1,658	1,589	1,679	1,874	1,632	1,735
North Dakota	13,259	14,259	17,824	21,992	23,652	25,181	25,030	25,731	26,350	27,126
Ohio	5,478	6,260	5,978	5,405	5,639	5,835	6,039	15,859	12,908	10,899
Oklahoma	214,661	200,699	198,090	192,913	193,081	202,732	201,962	202,524	203,441	224,839
Pennsylvania	8,179	6,472	6,170	6,009	5,643	5,302	5,083	5,113	4,922	4,337
South Dakota	54	58	151	281	233	169	215	247	219	239
Tennessee	7	7	6	20	17	14	16	10	11	7
Texas	1,073,867	940,166	971,978	927,479	939,191	943,328	977,835	989,525	1,057,706	1,056,706
Utah	4,367	24,811	39,959	37,594	33,118	31,029	33,435	28,575	25,298	24,112
Virginia	5	4	6	2	2	3	3	6	4	1
Washington	5	4	1	1	-	-	-	-	-	-
West Virginia	2,215	2,186	2,184	2,300	2,760	3,470	3,350	3,370	3,530	3,674
Wyoming	109,584	115,572	126,050	133,910	141,937	135,847	144,407	138,752	138,314	134,470
Total(Mb)	2,617.0	2,449.0	2,574.6	2,575.0	2,621.8	2,676.2	2,752.7	2,786.8	2,848.5	3,027.8
Daily Ave(Mb)	7.2	6.7	7.1	7.0	7.2	7.3	7.5	7.6	7.8	8.3

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(1) Includes Lease Condensate

Source: U.S. Bureau of Mines, Annual Petroleum Statements

Section IV
Table 4b

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousand Barrels)

STATE	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	7,348	7,635	7,701	7,263	7,832	9,934	11,677	13,323	13,477	14,706
Alaska	29,126	66,204	73,953	83,616	79,494	72,893	72,323	70,603	69,834	63,398
Arizona	2,924	3,370	2,433	1,784	1,236	993	804	740	635	519
Arkansas	21,075	19,464	18,049	18,035	18,263	18,519	18,016	16,527	16,133	18,097
California	359,219	375,496	375,291	372,191	358,484	347,022	336,075	323,003	322,199	326,021
Colorado	33,905	31,937	28,294	24,723	27,391	32,015	36,590	37,508	38,089	38,992
Florida	1,568	1,474	1,731	2,999	5,347	16,897	32,695	36,351	41,877	44,460
Illinois	59,142	56,391	50,724	43,747	39,084	34,874	30,669	27,553	26,067	26,272
Indiana	10,081	8,692	7,841	7,487	6,658	6,130	5,312	4,919	4,632	4,630
Kansas	99,200	94,505	88,716	84,853	78,532	73,744	66,227	61,691	59,106	58,714
Kentucky	15,535	14,036	12,924	11,575	10,692	9,702	8,687	7,837	7,556	7,483
Louisiana	774,527	817,426	844,603	906,907	935,243	891,827	831,524	737,324	650,840	606,501
Michigan	13,664	12,974	12,213	11,693	11,893	12,990	14,614	18,021	24,420	30,421
Mississippi	57,147	58,708	64,283	65,119	64,066	61,100	56,102	50,779	46,614	46,072
Missouri	75	65	67	66	66	60	60	56	57	61
Montana	34,959	48,460	43,954	37,879	34,599	33,904	34,620	34,554	32,844	32,814
Nebraska	13,373	13,183	12,106	11,451	10,062	8,705	7,240	6,611	6,120	6,182
Nevada	279	271	223	149	113	100	96	129	115	143
New Mexico	126,144	128,550	129,227	128,184	118,412	110,525	100,986	98,695	95,063	92,130
New York	1,972	1,532	1,256	1,194	1,126	1,018	967	896	875	857
North Dakota	25,315	25,040	22,703	21,998	21,653	20,624	20,235	19,697	20,452	21,725
Ohio	9,924	11,204	10,972	9,864	8,286	9,358	8,796	9,088	9,578	9,994
Oklahoma	230,749	221,623	224,729	223,574	213,313	207,633	191,204	177,785	163,123	161,426
Pennsylvania	4,387	4,160	4,448	4,093	3,798	3,441	3,282	3,478	3,264	3,019
South Dakota	211	187	158	160	233	219	275	494	472	447
Tennessee	7	6	32	309	398	198	201	769	682	598
Texas	1,119,962	1,133,380	1,151,775	1,249,697	1,222,926	1,301,686	1,294,671	1,262,126	1,221,929	1,189,523
Utah	24,048	23,504	23,295	23,370	23,630	26,570	32,656	39,363	42,301	34,304
Virginia	3	3	1	1	1	–	–	3	3	3
Washington	–	–	–	–	–	–	–	–	–	–
West Virgini	3,561	3,312	3,104	3,124	2,969	2,677	2,385	2,665	2,479	2,519
Wyoming	136,312	144,250	154,945	160,345	148,114	140,011	141,914	139,997	135,943	134,149
Total(Mb)	3,215.7	3.329.0	3,371.8	3,517.5	3,453.9	3,455.4	3,360.9	3,202.6	3,056.8	2,976.2
Daily Ave(Mb)	8.8	9.1	9.2	9.6	9.5	9.4	9.2	8.8	8.4	8.1

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(1) Includes lease condensate.

Source: U.S. Department of Interior, Bureau of Mines, Annual Petroleum Statements
U.S. Energy Information Administration, Annual Petroleum Statements

Section IV
Table 4c

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousands of Barrels)

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Alabama	18,252	19,829	19,161	22,153	20,680	20,014	18,746	19,804	21,581	21,122
Alaska	169,201	448,620	511,335	591,646	587,337	618,910	625,527	630,401	666,233	681,310
Arizona	427	418	472	406	357	335	237	215	175	161
Arkansas	20,202	20,329	18,869	18,210	18,352	18,849	18,849	18,730	19,044	15,778
California	349,609	347,181	352,268	356,923	384,958	401,572	404,688	412,020	423,877	406,665
Colorado	39,460	36,797	32,324	29,802	30,303	30,545	29,050	28,845	30,246	29,309
Florida	46,641	47,536	47,168	42,886	34,773	25,626	19,476	14,462	11,458	9,383
Illinois	25,608	23,362	21,793	22,702	24,090	27,710	29,200	28,868	30,265	27,245
Indiana	5,314	4,689	4,715	4,978	4,721	5,563	5,321	5,526	5,168	4,759
Kansas	57,496	56,586	56,995	60,151	65,810	70,525	71,594	75,729	75,407	67,034
Kentucky	6,581	5,724	5,514	5,946	6,548	7,349	7,886	7,777	7,790	6,475
Louisiana	562,905	532,740	489,687	469,141	449,315	458,395	479,569	515,268	508,239	512,108
Michigan	32,965	34,667	34,862	33,808	32,665	31,462	31,736	30,554	27,300	25,688
Mississippi	43,022	42,024	37,327	35,945	34,204	33,047	31,455	32,776	30,641	29,997
Missouri	60	54	91	130	226	202	269	285	243	110
Montana	32,680	30,467	29,957	29,584	30,813	30,921	29,225	29,761	29,768	27,072
Nebraska	5,968	5,862	6,068	6,240	6,671	6,872	6,380	6,452	6,943	7,098
Nevada	661	1,156	1,235	880	700	613	810	1,907	3,039	2,907
New Mexico	87,223	83,365	79,649	75,324	71,568	71,024	75,169	79,336	78,530	75,712
New York	824	852	855	824	841	834	831	840	1,071	853
North Dakota	23,273	24,812	30,914	40,337	45,424	47,271	50,690	52,652	50,857	45,628
Ohio	10,359	11,154	11,953	12,928	13,551	14,571	14,971	15,271	14,988	13,442
Oklahoma	156,382	150,456	143,642	150,140	154,056	158,621	158,604	168,385	162,739	149,105
Pennsylvania	2,715	2,887	2,874	2,651	3,729	4,282	4,282	4,284	4,851	3,783
South Dakota	632	869	846	765	973	1,158	1,172	1,340	1,596	1,586
Tennessee	820	593	614	743	918	1,132	1,056	920	786	644
Texas	1,137,880	1,074,050	1,018,094	977,436	945,132	925,296	902,676	904,774	888,831	839,606
Utah	33,113	31,368	27,728	24,978	25,860	22,440	29,534	34,689	40,792	39,172
Virginia	2	2	4	10	13	49	65	32	26	18
Washington	-	-	-	-	-	-	-	-	-	-
West Virginia	2,518	2,382	2,406	2,336	3,473	3,227	3,628	3,524	3,555	3,134
Wyoming	136,472	137,385	131,890	126,362	130,563	118,300	118,303	124,269	128,514	121,337
Total (Mb)	3,009.3	3,178.2	3.121.3	3,146.4	3,128.6	3,156.7	3,171.0	3,249.7	3,274.6	3,168.3
Daily Avg (Mbd)	8.2	8.7	8.6	8.6	8.6	8.6	8.7	8.9	9.0	8.7

(1) Includes lease condensate.

Source: U.S. Department of Energy, Energy Information Administration, Annual Petroleum Statements & Petroleum Supply Annuals.

U.S. CRUDE OIL PRODUCTION(1) BY STATE
(Thousands of Barrels)

STATE	1987	1988
Alabama	20,607	20,797
Alaska	715,955	738,143
Arizona	131	113
Arkansas	14,230	13,606
California	397,228	386,014
Colorado	29,360	32,352
Florida	8,270	7,746
Illinois	24,096	22,476
Indiana	3,902	3,665
Kansas	60,544	58,824
Kentucky	5,752	5,458
Louisiana	476,030	435,810
Michigan	25,971	23,250
Mississippi	28,351	27,553
Missouri	135	156
Montana	25,113	23,338
Nebraska	6,091	5,978
Nevada	3,112	3,230
New Mexico	72,328	71,235
New York	710	566
North Dakota	41,364	39,343
Ohio	12,153	11,711
Oklahoma	134,378	128,874
Pennsylvania	3,302	2,830
South Dakota	1,644	1,657
Tennessee	614	601
Texas	785,475	762,744
Utah	35,788	33,018
Virginia	17	25
Washington	--	--
West Virginia	2,835	2,621
Wyoming	115,922	113,985
Total (Mb)	3,053.5	2,979.1
Daily Avg (Mbd)	8.4	8.1

(1) Includes lease condensate.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1988.

Section IV
Table 5

U.S. STRIPPER WELL PRODUCTION BY STATE
(In Thousands of Barrels)
(As of January 1)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	--	--	26.2	45.7	87.1	116.7	162.4	139.2	120.7	144.4
Arizona	--	2.6	1.8	0.1	3.7	5.3	5.7	6.7	4.8	4.5
Arkansas	7,719.3	7,238.9	7,281.5	6,658.6	6,747.8	5,043.7	5,198.9	6,171.5	7,753.9	7,231.2
California	51,737.9	58,245.3	5,530.8	61,451.6	77,497.2	60,574.2	52,245.7	51,409.6	49,558.2	45,520.8
Colorado	2,149.5	2,050.3	2,024.1	1,919.6	1,829.5	1,953.4	2,012.5	2,017.0	2,018.1	1,955.0
Illinois	42,860.8	38,304.3	3,128.2	28,826.6	26,023.9	25,214.7	24,936.2	23,614.2	21,159.7	20,324.9
Indiana	7,777.1	6,439.3	6,108.4	5,254.2	4,919.9	4,031.7	4,470.8	5,255.3	4,559.9	4,556.6
Kansas	55,835.4	51,857.1	0,447.9	45,948.7	44,615.0	43,706.7	44,433.0	44,189.8	44,461.1	43,947.6
Kentucky	11,301.0	10,531.0	9,128.0	7,314.0	6,463.9	6,182.8	6,172.8	5,420.8	4,712.7	4,548.8
Louisiana	8,466.8	8,077.8	7,598.8	7,324.7	7,501.8	7,574.2	8,176.0	7,739.5	7,916.1	7,680.7
Michigan	4,754.6	4,731.7	4,826.2	4,863.3	4,883.0	4,760.3	4,601.8	6,233.0	5,601.9	5,620.5
Mississippi	875.4	1,043.0	425.3	438.0	571.5	648.8	1,214.6	1,349.3	1,233.5	1,600.9
Missouri	66.3	66.1	59.3	59.8	56.0	57.0	60.3	59.5	53.3	54.3
Montana	7,454.5	1,919.3	1,910.4	2,143.9	2,024.0	3,578.7	2,947.3	3,255.3	2,804.7	2,829.5
Nebraska	1,056.1	1,191.0	1,121.7	1,196.4	1,378.8	1,545.4	1,758.0	2,012.3	2,024.8	1,865.7
New Mexico	10,201.5	10,187.3	0,074.8	10,223.8	10,835.4	11,082.5	11,141.1	11,547.2	11,830.8	12,067.9
New York	1,193.5	1,096.7	1,018.0	969.0	896.0	875.0	857.0	813.0	852.0	855.0
North Dakota	853.8	936.5	798.1	853.8	933.5	929.7	1,075.1	1,145.9	1,196.5	1,250.2
Ohio	6,904.8	5,800.2	6,550.6	6,157.4	6,361.6	6,704.6	6,996.1	7,251.2	7,808.1	8,366.8
Oklahoma	85,645.2	80,895.8	7,967.1	74,109.9	73,694.7	72,530.6	73,459.3	74,400.4	74,175.4	76,000.5
Pennsylvania	4,015.0	3,798.0	3,441.0	3,282.0	3,399.0	3,199.0	2,950.0	2,659.4	2,564.5	2,816.7
South Dakota	--	27.9	25.8	26.3	21.0	18.0	20.5	14.5	16.5	22.3
Tennessee	11.8	29.9	24.5	44.8	107.8	125.6	140.4	194.1	269.9	387.5
Texas	123,736.6	122,417.4	16,635.7	112,246.9	126,386.9	126,018.3	129,699.8	127,886.4	131,210.9	136,590.2
Utah	90.3	82.7	97.1	132.0	123.5	98.2	261.8	136.4	134.5	180.0
Virginia	0.9	0.6	0.1	0	2.8	3.0	2.7	1.7	2.4	3.7
West Virginia	3,124.0	2,969.0	2,677.0	2,407.0	2,673.0	2,478.0	2,400.0	2,384.0	2,255.2	2,381.9
Wyoming	3,455.3	3,382.3	2,996.4	1,785.1	1,897.9	5,107.0	4,790.7	5,224.7	5,333.3	5,597.0
U.S. TOTAL	441,287.2	423,322.1	41,924.9	385,683.5	411,936.0	394,162.9	392,190.5	392,531.9	391,633.1	394,405.1

Source: Interstate Oil Compact Commission and National Stripper Well Association.

U.S. STRIPPER WELL PRODUCTION BY STATE
(In Thousands of Barrels)
(As of January 1)

State	1981	1982	1983	1984	1985	1986	1987	1988
Alabama	124.8	121.9	157.7	172.5	171.8	189.0	190.8	193.3
Arizona	15.8	22.6	23.9	25.6	29.0	28.1	25.5	30.1
Arkansas	5,689.5	5,465.0	5,131.9	7,117.9	5,653.3	5,285.8	5,113.5	4,888.2
California	44,109.7	54,803.8	55,419.4	55,993.3	57,124.5	41,573.4	37,181.7	37,795.8
Colorado	1,989.2	2,158.7	2,203.7	3,629.8	3,329.6	2,682.3	6,216.4	7,323.4
Illinois	20,166.5	22,238.4	23,989.1	25,889.5	25,983.9	27,718.6	24,157.2	21,682.2
Indiana	4,019.4	4,781.2	4,567.9	4,336.4	4,401.2	4,103.9	3,827.3*	3,657.2*
Kansas	44,454.1	45,010.4	47,629.1	48,267.4	48,664.8	50,861.4	61,434.9	57,802.8
Kentucky	4,572.5	4,479.2	5,143.6	5,521.9	6,630.2	6,696.0	5,514.3	4,881.7
Louisiana	7,657.3	9,011.5	9,172.0	9,000.0	9,844.0	9,000.0	10,059.3	8,809.5
Michigan	4,717.0	2,448.5	2,820.1	3,144.9	3,228.1	3,272.2	2,781.7*	2,674.0
Mississippi	1,890.4	3,804.7	2,236.5	1,286.2	1,330.2	1,721.3	1,121.0	1,270.0
Missouri	127.4	226.2	52.5	270.8	270.9	250.0	182.3	100.9
Montana	2,710.1	2,748.0	2,881.0	3,103.8	2,577.1	2,936.6	2,709.2	2,650.9
Nebraska	2,236.5	2,510.3	2,878.6	3,418.0	2,974.4	2,947.3	2,617.2	2,687.7
New Mexico	12,924.4	13,462.8	14,207.2	14,722.3	15,016.0	15,366.5	14,747.5	14,377.8
New York	824.0	849.0	719.0	774.3	679.9	600.6	488.9	511.3
North Dakota	1,225.1	1,386.1	1,492.5	1,537.3	1,755.7	1,905.2	1,692.8	1,833.3
Ohio	9,049.5	9,485.9	10,199.4	10,479.8	10,689.8	10,491.3	9,766.6	8,828.8
Oklahoma	79,945.0	83,248.7	94,237.0	94,430.5	94,045.6	91,841.8	95,902.8	109,081.6
Pennsylvania	2,650.5	3,606.0	3,717.9	3,950.5	4,241.7	4,257.4	3,356.1	2,870.1
South Dakota	24.7	39.3	55.4	43.9	82.1	65.3	34.5	57.4
Tennessee	293.4	290.5	N.A	583.7	510.3	450.8	474.6	444.8
Texas	141,825.2	145,939.8	143,928.7	153,688.5	152,719.8	158,738.5	147,986.4	141,704.3
Utah	220.3	376.7	N.A	542.7	1,088.8	1,550.3	877.8	935.4
Virginia	9.5	13.2	49.4	21.6	27.2	20.7	14.1	15.9
West Virginia	2,312.6	2,607.1	2,683.0	3,116.5	3,270.0	3,346.0	2,988.0	2,765.2
Wyoming	5,210.5	5,366.9	6,354.5	6,944.0	7,118.8	7,983.4	7,984.0	6,963.2
U.S. TOTAL	401,095.2	426,502.4	441,951.0	462,013.5	463,458.7	455,883.8	449,446.5	446,836.8

* Estimate.

Source: Interstate Oil Compact Commission and National Stripper Well Association.

Section IV
Table 6

OIL VOLUME, VALUE, AND REVENUES RECEIVED FROM ONSHORE FEDERAL AND INDIAN LANDS

	Federal			Indian		
Year	Volume (000 bbl)	Market Value (000 $)	Oil Revenues Received (000 $)	Volume (000 bbl)	Market Value (000 $)	Oil Revenues Received (000 $)
1920-1987	7,477,100.8	$50,245,131.6	$6,311,978.2	1,251,718.5	$7,800,672.5	$1,103,468.1
1980	149,699.3	3,275,608.5	413,403.2	21,991.8	449,435.0	67,185.9
1981	155,573.7	4,891,778.8	604,783.0	21,944.9	705,243.0	103,919.4
1982	149,612.8	4,273,036.0	524,530.2	19,809.9	611,292.2	92,559.8
1983	151,456.8	4,118,421.3	523,898.7	20,083.2	593,094.9	89,727.6
1984	152,339.4	4,086,190.8	519,046.6	21,801.3	584,887.1	75,973.0
1985	169,968.7	4,117,255.9	492,367.9	20,432.6	519,968.8	75,026.0
1986	157,297.5	2,227,484.7	268,689.6	19,977.9	295,214.3	42,420.4
1987	149,977.5	2,389,418.1	289,069.7	18,989.9	321,775.0	45,813.8

Source: U.S. Department of Interior, MMS--MINERAL REVENUES: Tne 1987 Report on Receipts from Federal and Indian Leases.

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1960		1970		1980	
Company	Production	Company	Production	Company	Production
Texaco	477.6	Standard of New Jersey	946.0	Exxon	787.0
Standard of New Jersey	439.0	Texaco	808.0	Standard of Ohio	715.8
Gulf	386.2	Gulf	626.0	Atlantic Richfield	555.7
Shell	354.9	Shell	595.0	Shell	511.0
Standard of California	297.8	Standard of California	474.4	Standard of Indiana	464.0
Standard of Indiana	286.0	Standard of Indiana	466.0	Texaco	413.0
Phillips	222.5	Atlantic Richfield	405.7	Gulf	364.2
Socony-Mobil	204.1	Mobil	385.0	Standard of California	335.0
Continental	171.0	Getty	317.0	Mobil	318.0
Sinclair	139.0	Union	314.0	Getty	271.0
Cities Service	125.2	Phillips	270.2	Phillips	269.7
Sun	114.1	Sun	258.6	Sun	206.1
Ohio Oil (Marathon)	104.8	Cities Service	202.7	Union	173.4
Union	102.9	Continental	188.0	Marathon	168.3
Atlantic Refining	97.7	Marathon	174.9	Cities Service	154.7
Tidewater	89.7	City of Long Beach(1)	163.5	Conoco	140.0
Amerada	80.9	Amerada Hess	95.7	Amerada Hess	88.3
Superior	79.7	Tenneco	87.0	Tenneco	79.2
Sunray Mid-Continent	71.2	Superior	65.2	City of Long Beach(1)	72.6
Skelly	69.0	Louisiana Land & Exploration	62.0	El Paso	72.3

(1) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with Arco, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

Section IV
Table 7a

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1983		1984		1985	
Company	Production	Company	Production	Company	Production
Exxon	781.0	Exxon	778.0	Exxon	768.0
Atlantic Richfield	652.8	Texaco(2)	673.8	Standard Oil (Ohio)	719.7
Standard of Ohio	612.0	Atlantic Richfield	654.7	Atlantic Richfield	647.7
Shell	524.0	Chevron (Standard of California)(3)	646.1	Texaco	640.0
Standard of Indiana	403.0	Standard of Ohio	634.4	Chevron	587.1
Texaco	346.0	Shell	534.0	Shell	530.0
Gulf	319.1	Standard of Indiana	409.0	Amoco (Std. of Ind.)	401.1
Standard of California	317.6	Mobil(4)	365.6	Mobil	352.0
Mobil	304.0	Phillips(5)	347.9	Phillips	346.0
Phillips	288.0	Sun	194.1	Sun	195.1
Getty	283.8	U.S. Steel(6)	174.1	Unocal	170.9
Sun	204.6	Unocal	168.8	U.S. Steel	160.2
Unocal (Union)	170.4	Occidental	150.0	Occidental	147.6
U.S. Steel	157.3	DuPont	120.0	DuPont	120.0
Occidental	148.0	Tenneco	98.6	Tenneco	101.4
DuPont	116.0	City of Long Beach(1)	78.6	City of Long Beach(1)	81.7
Tenneco	90.4	Amerada Hess	72.7	Amerada Hess	72.0
Amerada Hess	74.1	Union Pacific	68.8	Union Pacific	67.9
City of Long Beach(1)	72.1	El Paso	53.8	El Paso	64.7
Union Pacific	63.0	Mitchell	50.0	Santa Fe	49.9
U.S. TOTAL	10,299.0	U.S. TOTAL	10,554.0	U.S. TOTAL	10,636.0

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(1) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with Arco, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

(2) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figure includes 100% of Getty's estimated annualized production.

(3) Standard Oil of California acquired the Gulf Corporation on June 15, 1984, and on July 1, 1984 Standard changed its name to Chevron. Chevron's figure includes Gulf's 1984 full-year production.

(4) Mobil acquired Superior on September 28, 1984. Mobil's figure includes 100% of Superior's estimated annualized production.

(5) Phillips acquired Aminoil from R.J. Reynolds on October 26, 1984. Phillips' figure includes 100% of Aminoil's estimated annualized production.

(6) U.S. Steel acquired the U.S. assets of Husky Oil Ltd. on May 31, 1984. U.S. Steel's figure includes 100% of Husky's estimated annualized production of its U.S. assets.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1985, Discussion Paper #014R.

Section IV
Table 7b

TWENTY LEADING COMPANIES
U.S. CRUDE OIL, CONDENSATE AND NATURAL GAS LIQUIDS PRODUCTION
(Thousands of Barrels per Day)

1986		1987	
Company	Production	Company	Production
Exxon	761.0	BP America (Standard Oil)(4)	851.3
Standard Oil	726.6	Exxon	756.0
ARCO (Atlantic Richfield)	659.1	ARCO	665.0
Texaco	590.0	Shell	558.0
Shell	571.0	Texaco	540.0
Chevron	546.2	Chevron	506.9
Amoco	304.0	Amoco	394.0
Mobil	342.0	Mobil	338.0
Phillips	316.0	Phillips	287.0
USX (U.S. Steel)(1)	189.0	USX	171.1
Sun	171.3	Unocal	167.0
Unocal	167.9	Sun	159.3
Occidental	148.0	Occidental	129.0
DuPont	126.0	DuPont	107.0
Tenneco	104.1	Tenneco	100.9
City of Long Beach(2)	76.9	Burlington Northern	79.8
Union Pacific	71.2	Amerada Hess	68.5
Burlington Northern(3)	71.0	City of Long Beach(2)	67.8
Amerada Hess	68.8	Union Pacific	61.1
Enron	50.9	Enron	57.1
U.S. TOTAL	10,289.0	U.S. TOTAL	10,008.0

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(1) On February 11, 1986 a subsidiary of U.S. Steel merged with Texas Oil and Gas (TXO). On July 8, 1986, in recognition of its major diversification into oil and gas businesses, U.S. Steel changed its name to USX Corporation.

(2) Long Beach, California owns several oil fields and a large percentage of the oil produced from these fields. It has contracts with ARCO, Exxon, Mobil, Shell, Texaco, Unocal and others to develop the properties. Because the oil owned by Long Beach is not included in the contracted companies' net production figures, the city has been included as a separate incorporated municipality.

(3) On December 13, 1985 Southland Royalty became a wholly owned subsidiary of Burlington Northern Inc. (BNI). BNI also is the parent company of El Paso Natural Gas.

(4) BP America was formed in 1987 through the acquisition of The Standard Oil Company by BP North America Inc.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion Paper #014R.

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	--	--	--	--	--	--	--	--	--	--	--	--	--	55.3
Alaska	--	--	--	--	--	--	--	--	--	--	--	--	170.8	138.9
Arizona	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	23.6	23.8	22.4	23.2	21.8	20.8	20.0	18.6	17.2	16.3	15.6	13.8	12.2	13.1
California	38.3	36.5	35.9	34.2	33.7	32.5	31.8	30.1	28.8	27.1	25.5	23.4	23.1	22.3
Colorado	84.4	75.1	89.1	84.0	94.7	90.2	89.8	85.2	78.2	78.2	69.5	61.0	59.4	63.1
Florida	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois	7.1	6.8	6.6	6.2	6.0	5.7	6.1	6.1	7.5	7.4	6.7	6.9	6.6	6.6
Indiana	7.6	7.5	9.3	9.2	8.7	8.8	8.9	7.5	7.3	7.4	7.8	6.8	6.4	6.4
Kansas	10.7	10.9	9.7	9.7	9.9	9.5	9.1	8.9	9.0	9.2	8.9	8.6	8.4	7.7
Kentucky	1.7	1.6	1.6	1.8	2.0	1.9	1.9	2.3	2.5	2.6	2.8	2.6	3.7	2.8
Louisiana	52.4	53.7	50.6	50.3	52.3	51.7	51.1	44.7	42.7	41.2	42.2	38.1	42.7	45.5
Michigan	12.6	13.0	12.3	11.2	9.8	9.3	8.4	8.1	7.5	7.1	6.8	6.4	7.1	10.3
Mississippi	100.2	102.5	74.3	68.2	59.2	54.7	51.1	45.5	45.8	47.3	45.5	47.5	58.5	51.5
Missouri	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Montana	8.5	8.6	8.0	6.9	7.3	7.6	9.4	11.4	12.6	17.0	20.2	19.9	21.0	21.8
Nebraska	10.5	10.7	16.4	42.4	35.0	26.0	53.5	47.4	45.8	54.8	57.8	50.3	47.3	43.0
Nevada	--	--	--	--	--	--	--	--	--	--	--	--	--	--
New Mexico	23.1	25.3	23.8	22.4	23.4	24.4	27.4	27.2	27.7	26.6	25.7	23.6	23.4	21.7
New York	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.2	0.3	0.3
North Dakota	--	--	--	--	--	99.6	83.5	46.0	59.3	54.2	42.5	39.9	38.5	42.3
Ohio	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.0	0.9
Oklahoma	7.4	8.0	7.7	8.1	9.0	8.8	9.0	7.9	8.2	8.4	8.1	7.3	7.2	6.9
Pennsylvania	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2
South Dakota	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Texas	21.1	22.4	17.5	18.3	21.0	20.4	19.7	18.0	18.4	17.9	16.1	13.6	14.1	13.3
Utah	--	--	--	--	--	--	--	--	--	--	75.7	182.7	180.1	137.6
Virginia	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Wyoming	28.7	33.7	27.5	32.9	34.6	32.6	40.0	42.5	40.4	40.5	41.1	42.4	47.2	50.3
Other	16.4	15.6	25.9	32.8	32.8	35.3	35.7	33.2	32.4	41.9	45.4	42.0	34.1	12.0
TOTAL	12.0	12.8	11.4	11.8	13.1	13.0	13.1	12.6	13.2	13.3	12.8	11.7	12.2	12.0

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(1) Includes lease condensate.

Source: U.S. Bureau of Mines, Minerals Yearbook and Annual Petroleum Statement.

Section IV
Table 8a

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
Alabama	47.6	47.2	52.8	45.5	42.6	42.2	38.1	38.7	38.5	35.8	38.4	49.3	56.6
Alaska	559.2	573.6	555.2	549.4	539.6	809.9	961.4	1,407.7	1,171.2	1,190.1	1,161.6	1,088.3	1,029.3
Arizona	--	21.4	28.7	20.6	29.5	45.2	616.2	438.5	261.4	171.5	116.8	93.6	78.7
Arkansas	12.6	12.4	12.6	12.1	11.8	10.5	9.0	8.2	7.9	7.5	7.1	7.1	6.9
California	21.6	21.9	20.7	20.2	21.2	23.0	23.7	24.7	25.0	25.0	24.5	24.0	23.6
Colorado	63.4	56.3	50.7	47.3	46.9	42.6	45.3	49.1	42.6	37.8	42.2	47.5	51.4
Florida	--	104.4	110.5	109.3	140.7	123.2	103.5	94.8	106.6	156.5	212.3	419.7	619.9
Illinois	6.6	6.9	6.8	6.4	6.0	5.9	5.7	5.6	5.1	4.5	4.2	3.8	3.4
Indiana	5.8	5.8	5.6	5.4	5.9	5.5	5.5	5.2	5.1	5.0	4.8	4.2	3.3
Kansas	7.6	7.0	6.4	6.2	6.1	6.1	5.8	5.6	5.4	5.3	5.0	4.8	4,4
Kentucky	2.5	2.5	2.9	3.6	3.4	3.3	3.0	3.0	2.9	2.7	2.2	1.8	1.6
Louisiana	47.1	51.1	52.2	52.6	54.7	60.3	68.7	73.3	77.6	86.7	93.6	89.3	81.9
Michigan	12.0	10.9	10.3	10.2	9.9	9.6	9.2	8.6	8.2	7.8	7.8	9.2	10.8
Mississippi	50.7	56.8	61.3	59.0	60.4	59.8	61.3	62.2	68.4	63.2	56.5	53.0	50.4
Missouri	--	1.4	1.4	1.7	1.7	1.8	1.4	1.3	1.3	1.2	1.4	1.2	1.2
Montana	24.0	24.7	23.1	24.0	25.2	26.5	27.8	39.1	35.9	31.6	29.7	27.7	27.0
Nebraska	38.9	37.6	34.3	30.4	28.4	24.3	24.9	25.4	24.5	24.6	22.6	20.4	17.6
Nevada	--	96.6	80.8	154.8	81.8	88.5	66.5	57.0	50.9	40.8	41.3	45.5	43.8
New Mexico	20.8	19.1	18.3	18.1	18.4	19.7	20.8	20.9	20.8	20.4	18.8	17.5	16.1
New York	0.2	0.3	0.3	0.4	0.4	0.4	1.1	0.9	0.7	0.6	0.5	0.5	0.5
North Dakota	41.4	39.7	37.9	38.0	37.4	37.2	34.0	33.1	30.6	35.0	40.6	39.3	39.5
Ohio	0.9	0.9	1.1	3.1	2.6	2.1	1.9	2.0	1.9	1.8	1.5	1.7	1.6
Oklahoma	6.7	6.9	6.8	6.8	6.9	7.6	7.8	7.5	7.6	7.7	7.6	7.6	7.1
Pennsylvania	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
South Dakota	--	24.4	27.4	28.1	23.1	14.7	20.3	18.6	16.3	16.9	21.6	19.3	26.9
Tennessee	--	1.1	1.1	0.7	0.8	0.6	0.6	0.5	2.6	18.6	15.9	7.2	7.9
Texas	13.2	13.1	13.5	13.6	13.8	23.0	15.8	16.3	17.0	19.0	19.2	20.9	21.7
Utah	114.0	103.3	108.6	93.2	82.5	77.4	75.9	73.6	74.3	73.9	73.6	82.5	95.2
Virginia	--	1.6	1.5	2.3	1.6	0.7	2.7	1.8	0.5	0.5	0.9	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.5
Wyoming	50.6	48.1	52.1	49.1	47.0	44.6	44.0	46.8	49.1	48.1	44.5	42.7	46.9
Other	13.4	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	12.1	12.3	12.7	12.9	13.3	14.2	15.3	16.2	16.9	18.0	18.1	18.4	18.3

(1) Includes lease condensate.

Source: U.S. Bureau of Mines, Minerals Yearbook and Annual Petroleum Statement

Section IV
Table 8b

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Alabama	62.5	62.1	64.8	79.1	85.0	80.3	90.1	81.9	76.3	69.3	71.3	73.0
Alaska	989.4	947.2	897.5	1,935.6	3,805.3	3,765.9	3,853.4	2,298.8	2,231.1	2,550.3	2,691.3	1,868.3
Arizona	76.5	65.7	51.6	41.8	36.4	37.0	33.6	27.9	25.5	19.1	18.9	17.1
Arkansas	6.3	6.1	6.7	7.2	7.1	6.5	6.1	6.1	6.0	6.2	5.4	5.4
California	22.4	21.7	21.3	22.3	21.9	22.1	21.9	22.4	23.3	23.5	23.2	23.3
Colorado	49.2	45.1	40.4	36.9	32.1	26.4	23.5	28.5	26.9	17.3	14.7	15.2
Florida	703.8	822.4	849.5	903.1	1,037.7	1,143.6	993.0	814.3	570.8	389.5	286.3	210.7
Illinois	3.1	3.0	3.1	3.0	2.7	2.5	2.5	2.5	2.8	2.8	2.6	2.7
Indiana	3.1	2.8	2.6	2.9	2.5	2.4	2.5	2.3	2.5	2.3	2.2	2.0
Kansas	4.1	3.9	3.8	3.7	3.6	3.6	3.6	4.3	4.2	4.0	4.2	4.0
Kentucky	1.5	1.5	1.5	1.3	1.1	1.1	1.1	1.2	1.3	1.4	1.1	1.0
Louisiana	72.3	64.0	61.4	61.5	60.3	54.5	50.5	48.6	56.1	56.2	57.4	53.9
Michigan	12.4	17.0	22.4	23.5	24.4	24.6	21.0	20.3	19.0	17.7	17.1	14.6
Mississippi	54.0	56.9	56.6	47.0	40.0	32.9	26.3	29.7	34.3	31.6	35.0	24.2
Missouri	1.1	1.0	1.0	0.9	0.9	1.2	1.4	1.5	1.1	1.3	1.4	1.1
Montana	28.8	28.3	27.4	27.0	24.8	23.2	22.2	21.3	19.7	17.1	19.4	19.4
Nebraska	16.2	14.5	13.6	12.2	11.3	11.0	10.5	9.8	9.4	8.3	8.4	9.1
Nevada	47.1	42.0	43.4	120.7	186.3	188.0	120.2	NA	NA	NA	140.8	185.0
New Mexico	17.8	19.3	18.2	16.9	14.4	11.2	11.2	12.0	11.8	11.8	11.9	11.5
New York	0.5	0.5	0.5	0.5	0.9	0.5	0.4	0.4	0.4	0.4	0.5	0.6
North Dakota	37.3	32.2	33.3	40.2	34.7	34.4	39.6	48.4	45.6	37.2	42.3	37.7
Ohio	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5
Oklahoma	6.7	6.2	6.1	5.9	5.5	5.2	5.2	5.1	4.7	4.5	4.6	4.3
Pennsylvania	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6
South Dakota	46.7	37.5	30.2	30.9	30.9	25.8	21.9	22.2	24.4	22.9	26.5	26.5
Tennessee	19.1	11.5	8.4	9.0	5.5	5.1	5.2	5.1	4.8	4.2	3.2	2.7
Texas	21.7	20.9	20.2	19.2	17.8	16.6	10.5	14.3	13.5	12.6	12.1	11.6
Utah	104.4	96.6	74.7	68.6	62.8	53.3	41.7	45.9	38.8	49.5	52.7	57.5
Virginia	5.5	1.6	1.2	1.0	1.2	1.8	3.6	NA	NA	NA	NA	NA
Washington	--	--	--	--	--	--	--	--	--	--	--	--
West Virginia	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.6
Wyoming	47.1	41.1	39.6	37.1	35.3	33.9	29.0	30.9	27.5	28.6	29.4	29.2
Other	--	--	--	--	--	--	--	--	36.3	43.6	2.8	2.5
TOTAL	17.6	16.6	16.3	16.4	17.0	16.3	15.9	15.4	14.9	14.4	14.3	13.9

(1) Includes lease condensate.

Source: 1974-1980: U.S. Department of Energy, Energy Information Administration, Annual Petroleum Statements.
1981-1985: Calculated by API based on crude oil production from U.S. Department of Energy, Energy Information Administration divided by the number of producing wells from World Oil Magazine.

Section IV
Table 8c

U.S. AVERAGE CRUDE OIL PRODUCTION(1) PER WELL PER DAY BY STATE
(Barrels)

STATE	1986	1987	1988
Alabama	68.6	64.5	63.7
Alaska	1,683.1	1,613.1	1,545.5
Arizona	N.A.	15.6	15.4
Arkansas	4.3	4.6	4.7
California	25.5	23.8	23.0
Colorado	14.6	14.3	14.1
Florida	225.5	185.7	194.2
Illinois	2.3	2.0	1.9
Indiana	1.7	1.4	1.3
Kansas	3.8	3.4	3.4
Kentucky	0.8	0.7	0.7
Louisiana	57.0	43.8	44.0
Michigan	14.4	14.2	13.1
Mississippi	36.8	35.9	36.7
Missouri	0.7	1.5	1.5
Montana	18.9	17.0	15.4
Nebraska	10.6	9.0	9.0
Nevada	274.6	243.6	284.7
New Mexico	11.3	10.8	10.9
New York	0.5	0.4	0.4
North Dakota	35.3	32.6	30.6
Ohio	1.2	1.1	1.1
Oklahoma	4.1	3.6	3.6
Pennsylvania	0.5	0.6	0.6
South Dakota	29.4	30.2	30.0
Tennessee	2.2	2.6	2.3
Texas	11.4	10.9	10.5
Utah	57.8	54.9	48.8
Virginia	1.5	1.6	2.4
West Virginia	0.5	0.5	0.4
Wyoming	28.0	28.8	26.3
TOTAL	13.9	13.5	13.3

(1) Includes lease condensate.

Source: Calculated by API based on crude oil production from the Department of Energy and number of producing wells for World Oil Magazine.

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1857	0	0	0	2	0	0	0	2
1858	0	0	0	4	0	0	0	4
1859	2	0	0	5	0	0	0	7
1860	500	0	0	8	0	0	0	508
1861	2,114	0	0	17	0	0	0	2,131
1862	3,057	12	0	23	0	0	0	3,092
1863	2,611	83	0	69	0	0	0	2,763
1864	2,116	90	0	98	0	0	0	2,304
1865	2,498	110	0	108	0	0	0	2,716
1866	3,598	175	0	126	0	0	0	3,899
1867	3,347	190	0	172	0	0	0	3,709
1868	3,646	200	0	144	0	0	0	3,990
1869	4,215	220	0	261	0	0	0	4,696
1870	5,261	250	0	288	0	0	0	5,799
1871	5,205	270	0	255	0	0	0	5,730
1872	6,293	308	0	276	0	0	0	6,877
1873	9,894	365	0	579	0	0	0	10,838
1874	10,927	169	0	837	0	0	0	11,933
1875	11,963	220	0	964	0	0	5	13,152
1876	9,133	312	0	1,599	0	0	7	11,051
1877	13,350	312	0	2,082	0	0	10	15,754
1878	15,397	312	0	2,690	0	0	18	18,417
1879	19,914	575	0	3,089	0	0	23	23,601
1880	26,286	350	0	3,356	0	0	28	30,018
1881	27,661	275	0	4,040	0	0	17	31,993
1882	30,511	275	0	5,064	0	0	15	35,865
1883	23,450	250	0	6,535	0	0	20	30,255
1884	24,218	250	0	11,473	0	0	28	35,969
1885	21,859	250	0	14,626	0	0	30	36,765
1886	28,065	584	0	18,556	0	0	38	47,243
1887	28,283	526	0	18,969	0	0	29	47,807
1888	27,612	695	0	23,821	0	0	37	52,165
1889	35,164	705	0	25,491	0	0	147	61,507
1890	45,824	795	0	29,844	0	0	170	76,633
1891	54,293	755	0	35,809	0	0	243	91,100
1892	50,515	780	0	37,133	0	0	311	88,739
1893	48,431	798	0	41,804	0	0	1,055	92,088
1894	49,344	829	0	37,976	0	0	1,188	89,337

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(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

Section IV
Table 9a

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1895	52,892	726	0	48,316	0	0	1,758	103,692
1896	60,960	727	47	50,371	0	0	2,094	114,199
1897	60,476	710	71	57,376	0	0	3,360	121,993
1898	55,364	758	71	64,961	0	0	3,825	124,979
1899	57,071	808	89	69,903	0	0	3,276	131,147
1900	63,621	913	274	80,126	0	0	4,203	149,137
1901	69,389	757	285	90,427	0	0	6,562	167,440
1902	88,767	531	327	87,115	0	0	5,043	181,809
1903	100,461	487	353	84,053	0	0	9,489	194,879
1904	117,081	553	416	88,746	0	0	11,112	217,948
1905	134,717	634	624	65,752	0	0	13,334	215,091
1906	126,494	569	1,033	71,376	0	0	13,761	213,263
1907	166,095	789	1,806	79,242	0	0	16,045	263,957
1908	178,527	528	4,890	84,111	0	0	17,201	285,287
1909	183,171	421	4,200	91,291	0	0	19,606	298,709
1910	209,557	316	5,055	93,817	0	0	18,998	327,763
1911	220,449	291	14,316	88,903	0	21	20,361	344,361
1912	222,935	243	18,794	90,615	0	214	19,622	352,443
1913	248,446	228	28,402	85,111	1,857	98	21,183	385,345
1914	265,763	215	29,992	87,104	2,910	754	21,786	407,544
1915	281,104	215	36,753	86,677	3,616	216	23,442	432,033
1916	300,767	195	44,935	82,056	4,477	412	24,630	457,500
1917	335,316	214	60,867	73,704	7,147	952	24,662	502,515
1918	355,928	305	70,183	42,598	8,623	1,942	23,911	503,515
1919	378,367	241	93,358	45,150	10,139	1,522	27,078	555,875
1920	442,929	196	164,137	39,181	12,230	1,046	29,145	688,884
1921	472,183	188	203,047	43,297	16,673	1,258	29,336	766,002
1922	557,531	179	195,487	51,736	22,247	1,197	30,499	858,898
1923	732,407	170	166,448	56,734	25,230	1,063	34,020	1,015,736
1924	713,940	161	166,340	65,481	32,373	1,133	34,866	1,014,318
1925	763,743	332	156,324	76,367	34,038	1,238	35,868	1,067,933
1926	770,874	364	157,594	94,974	35,842	1,197	35,981	1,096,823
1927	901,129	477	166,943	110,496	40,026	1,275	42,223	1,262,562
1928	901,474	624	205,641	122,970	44,174	1,850	48,026	1,324,774
1929	1,007,323	1,117	235,455	141,764	42,943	1,888	55,339	1,485,867
1930	898,011	1,522	229,024	176,984	46,742	2,012	57,569	1,411,904
1931	851,081	1,543	201,218	222,372	45,276	2,045	50,074	1,373,656
1932	785,159	1,044	200,555	218,032	50,308	1,901	53,244	1,310,298
1933	905,656	1,145	203,143	216,679	55,340	1,670	57,364	1,441,000
1934	908,065	1,411	234,673	247,248	65,825	1,552	62,696	1,521,474

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(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

HISTORICAL WORLD CRUDE OIL PRODUCTION BY AREA: 1857-1946
(Thousands of Barrels)

Year	United States	Canada	Latin America(1)	Europe(2)	Middle East	Africa	Asia-Pacific	Total World
1935	996,596	1,447	251,071	254,392	85,946	1,305	64,190	1,654,951
1936	1,099,687	1,500	262,975	261,058	97,789	1,282	67,245	1,791,540
1937	1,279,160	2,944	305,367	257,836	117,467	1,218	75,235	2,039,231
1938	1,214,355	6,966	301,454	267,064	119,808	1,608	76,772	1,988,041
1939	1,264,962	7,838	327,256	278,897	120,465	4,693	82,045	2,086,160
1940	1,353,214	8,591	312,942	284,094	102,691	6,532	81,743	2,149,821
1941	1,402,228	10,134	351,438	300,443	74,531	8,573	73,310	2,220,657
1942	1,386,645	10,365	255,151	295,536	102,753	8,316	34,334	2,093,100
1943	1,505,613	10,152	292,614	269,723	110,900	8,992	58,743	2,256,637
1944	1,677,904	10,099	381,747	331,649	147,496	9,452	33,942	2,592,289
1945	1,713,655	8,483	450,146	203,888	194,258	9,434	14,833	2,594,697
1946	1,733,939	7,586	516,167	214,046	256,369	9,091	8,232	2,745,430

(1) Includes Mexico beginning in 1901.
(2) Includes Western Europe plus U.S.S.R., Rumania, Poland, Hungary, Czechoslovakia, Bulgaria and Albania.
(3) Totals for Free World and Sino-Soviet Bloc are not available prior to 1947.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbook.

Section IV
Table 10

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868
Pennsylvania	2	500	2,114	3,057	2,611	2,116	2,498(1)	3,598(1)	3,347(1)	3,646(1)
U.S. TOTAL	2	500	2,114	3,057	2,611	2,116	2,498	3,598	3,347	3,646

State	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878
California	NA	NA	NA	NA	NA	NA	175(2)	12	13	15
Ohio	NA	NA	NA	NA	NA	NA	200(2)	32	30	38
Pennsylvania	4,215(1)	5,261(1)	5,205(1)	6,293(1)	9,894(1)	10,927(1)	8,969(1)	8,969(1)	13,135(1)	15,164(1)
West Virginia	NA	NA	NA	NA	NA	NA	2,800(2)	172	172	180
U.S. TOTAL	4,215	5,261	5,205	6,293	9,894	10,927	11,963(2)	9,133	13,350	15,397

State	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888
California	20	40	100	129	143	262	325	377	678	690
Colorado	0	0	0	0	0	0	0	0	76	298
Kentucky	NA	NA	NA	161(2,3)	5(3)	4(3)	5(3)	5(3)	5(3)	5(3)
Ohio	20	39	34	40	47	90	662	1,783	5,023	10,011
Pennsylvania	19,685(1)	26,028(1)	26,376(1)	23,368	19,125	20,541	18,118	23,647	20,281	16,489(1)
West Virginia	180	179	151	128	126	90	91	102	145	119
U.S. TOTAL	19,914	26,286	27,661	30,511(4)	23,450	24,218	21,859	28,065	28,283	27,612

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(1) Includes New York.
(2) 1875 total U.S. production includes cumulative California production, 1861-1875; cumulative Ohio and West Virginia production, 1860-1875.
(3) Includes Tennessee.
(4) 1882 total U.S. production includes cumulative Kentucky production, 1860-1882.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
California	303	307	324	385	470	706	1,209	1,253	1,903	2,257
Colorado	317	369	666	824	594	516	438	361	385	444
Illinois	1	1	1	1	1	(1)	(1)	(1)	1	(1)
Indiana	33	64	137	698	2,335	3,689	4,386	4,681	4,122	3,731
Kansas	1	1	2	5	18	40	44	114	81	72
Kentucky	5(2)	6(2)	9(2)	7(2)	3(2)	2(2)	2(2)	2(2)	(1)	6(2)
Ohio	12,472	16,125	17,740	16,363	16,249	16,792	19,545	23,941	21,561	18,739
Oklahoma	0	0	(1)	(1)	(1)	(1)	(1)	(1)	1	0
Pennsylvania	19,591	28,458(3)	31,424	27,149	19,283	18,078	18,231	19,379	17,983	14,743
Texas	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	66	546
West Virginia	544	493	2,406	3,810	8,446	8,577	8,120	10,020	13,090	13,615
Wyoming	0	0	0	0	0	2	4	3	4	6
U.S. TOTAL	35,164	45,824	54,293	50,515	48,431	49,344	52,892	60,960	60,476	55,634

(1) Less than 500 barrels.
(2) Includes Tennessee.
(3) Includes New York.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
California	2,642	4,325	8,787	13,984	24,382	29,649	33,428	33,099	39,748	44,855
Colorado	390	317	461	397	484	501	376	328	332	380
Illinois	(1)	--	(1)	(1)	--	--	181	4,397	24,282	33,686
Indiana	3,848	4,874	5,757	7,481	9,186	11,339	10,964	7,674	3,283	3,283
Kansas	70	75	179	332	932	4,251	12,014(2)	21,718(2)	2,410	1,801
Kentucky	18(3)	62(3)	137(3)	185	554(3)	998(3)	1,217(3)	1,214(3)	821(3)	728
Louisiana	--	--	--	549	918	2,959	8,910	9,077	5,000	5,789
Michigan	--	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Missouri	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Ohio	21,142	22,363	21,648	21,014	20,480	18,877	16,347	14,788	12,207	10,859
Oklahoma	--	6	10	37	139	1,367	(5)	(5)	43,524	45,799
Pennsylvania	13,054	13,258	12,625	12,064	11,355	11,126	10,437	10,257	10,000	9,424
Texas	669	836	4,394	18,084	17,956	22,241	28,136	12,568	12,323	11,207
Utah	--	--	--	--	--	--	--	--	(4)	(4)
West Virginia	13,911	16,196	14,177	13,513	12,900	12,645	11,578	10,121	9,095	9,523
Wyoming	6	6	5	6	9	12	8	7	9	18
Other States	--	2	2	1	9	3	3	3	4	15
U.S. TOTAL	57,071	63,621	69,389	88,767	100,461	117,081	134,717	126,494	166,095	178,527

(1) Less than 500 barrels.
(2) Includes Oklahoma.
(3) Includes Tennessee.
(4) Included in Other States.
(5) Included in Kansas.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
California	55,472	73,011	81,134	87,269	97,788	99,775	86,592	90,952	93,878	97,532
Colorado	311	240	227	206	189	223	208	197	121	143
Illinois	30,898	33,143	31,317	28,602	23,894	21,920	19,042	17,714	15,777	13,366
Indiana	2,296	2,160	1,695	970	956	1,336	876	769	760	878
Kansas	1,264	1,128	1,279	1,593	2,375	3,104	2,823	8,738	36,536	45,451
Kentucky	639	469	472	484	525	503	437	1,202	3,088	4,368
Louisiana	3,060	6,841	10,721	9,263	12,499	14,309	18,192	15,248	11,392	16,043
Michigan	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Missouri	(1)	(1)	(1)	--	(1)	(1)	(1)	(1)	--	--
Montana	--	--	--	--	--	--	--	45	100	69
Ohio	10,633	9,916	8,817	8,969	8,781	8,536	7,825	7,744	7,751	7,285
Oklahoma	47,859	52,029	56,069	51,427	63,579	73,632	97,915	107,072	107,508	103,347
Pennsylvania	9,299	8,795	8,248	7,838	7,917	8,170	7,838	7,593	7,733	7,408
Tennessee	--	--	--	--	--	--	--	1	12	8
Texas	9,534	8,899	9,526	11,735	15,010	20,068	24,943	27,645	32,413	38,750
Utah	(1)	(1)	(1)	--	--	--	--	--	--	--
West Virginia	10,745	11,753	9,796	12,129	11,567	9,680	9,265	8,731	8,379	7,867
Wyoming	20	115	187	1,572	2,407	3,560	4,246	6,234	8,978	12,596
Other States	6	4	8	4	11	8	14	8	10	8
U.S. TOTAL	183,171	209,557	220,449	222,935	248,446	265,763	281,104	300,767	335,316	355,928

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Arkansas	--	(1)	10,473	12,712	36,610	46,028	77,398	58,332	40,005	32,096
California	101,183	103,377	112,600	138,468	262,876	228,933	232,492	224,673	231,196	231,811
Colorado	121	111	108	97	86	445	1,226	2,768	2,831	2,774
Illinois	11,960	10,774	10,043	9,383	8,707	8,081	7,863	7,760	6,994	6,462
Indiana	972	945	1,158	1,087	1,043	935	829	808	852	1,052
Kansas	33,048	39,005	36,456	31,766	28,250	28,836	38,357	41,498	41,069	38,596
Kentucky	9,278	8,738	9,013	8,973	8,069	7,407	6,759	6,274	6,719	7,359
Louisiana	17,188	35,714	27,103	35,376	24,919	21,124	20,272	23,201	22,818	21,847
Michigan	(1)	--	--	--	--	--	4	94	439	594
Missouri	(1)	(1)	(1)	(1)	(1)	--	--	--	--	--
Montana	90	340	1,509	2,449	2,782	2,815	4,091	7,727	5,058	4,015
Ohio	7,736	7,400	7,335	6,781	7,085	6,811	7,212	7,272	7,593	7,015
Oklahoma	86,911	106,206	114,634	149,571	160,929	173,538	176,768	179,195	277,775	249,857
Pennsylvania	8,137	7,438	7,418	7,425	7,609	7,486	8,097	8,961	9,526	9,956
Tennessee	15	14	12	10	8	10	24	43	60	46
Texas	79,366	96,868	106,166	118,684	131,023	134,522	144,648	166,916	217,389	257,320
Utah	--	(1)	--	--	00	(1)	(1)	(1)	(1)	(1)
West Virginia	8,327	8,249	7,822	7,021	6,358	5,920	5,763	5,946	6,023	5,661
Wyoming	13,172	16,831	19,333	26,715	44,785	39,498	29,173	25,776	21,307	21,461
Other States	12	13	12	13	18	13	12	8	7	6
U.S. TOTAL	378,367	442,929	472,183	557,531	732,407	713,940	763,743	770,874	901,129	901,474

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Arkansas	24,917	19,702	14,791	12,051	11,686	11,182	11,008	10,469	11,764	18,180
California	292,534	227,329	188,830	178,128	172,010	174,305	207,832	214,773	238,521	249,749
Colorado	2,358	1,656	1,545	1,136	919	1,139	1,560	1,650	1,605	1,412
Illinois	6,319	5,736	5,039	4,673	4,244	4,479	4,322	4,475	7,499	24,075
Indiana	981	994	840	806	737	838	777	822	844	995
Kansas	42,813	41,638	37,018	34,848	41,976	46,482	54,843	58,317	70,761	60,064
Kentucky	7,775	7,389	6,456	6,287	4,608	4,860	5,258	5,633	5,484	5,821
Louisiana	20,554	23,272	21,804	21,807	25,168	32,869	50,330	80,491	90,924	95,208
Michigan	4,528	3,911	3,789	6,910	7,942	10,603	15,776	11,928	16,628	18,745
Missouri	--	--	--	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Montana	3,980	3,349	2,830	2,457	2,273	3,603	4,603	5,868	5,805	4,946
Ohio	6,743	6,486	5,327	4,644	4,235	4,234	4,082	3,847	3,559	3,298
Oklahoma	225,004	216,486	180,574	153,244	182,251	180,107	185,288	206,555	228,839	174,994
Pennsylvania	11,820	12,803	11,892	12,412	12,624	14,478	15,810	17,070	19,189	17,426
Tennessee	19	21	6	5	5	10	15	(1)	(1)	(1)
Texas	296,876	290,457	332,437	312,478	402,609	381,516	392,666	427,411	510,318	475,850
Utah	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	11	12
West Virginia	5,574	5,071	4,472	3,876	3,815	4,095	3,902	3,847	3,845	3,684
Wyoming	19,314	17,868	14,834	13,418	11,227	12,556	13,755	14,582	19,166	19,022
Other States	7	7	7	16	30	41	50	63	66	70
U.S. TOTAL	1,007,323	898,011	851,081	785,159	905,656	908,065	996,596	1,099,687	1,279,160	1,214,355

(1) Included in Other States.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

HISTORICAL U.S. CRUDE OIL PRODUCTION BY STATE: 1859-1946
(In Thousands of Barrels)

State	1939	1940	1941	1942	1943	1944	1945	1946
Alabama	--	--	--	--	--	43	181	380
Arkansas	21,238	25,775	26,327	26,628	27,600	29,418	28,613	28,375
California	224,354	223,881	230,263	248,326	284,188	311,793	326,482	314,713
Colorado	1,404	1,626	2,150	2,199	2,320	3,083	5,036	11,856
Florida	--	--	--	--	4	12	30	57
Illinois	94,912	147,647	132,393	106,391	82,260	77,413	75,094	75,297
Indiana	1,711	4,978	7,411	6,743	5,283	5,118	4,868	6,726
Kansas	60,703	66,139	83,242	97,636	106,178	98,762	96,415	97,218
Kentucky	5,621	5,188	4,762	4,534	7,883	9,621	10,325	10,578
Louisiana	93,646	103,584	115,908	115,785	123,592	129,645	131,051	143,669
Michigan	23,462	19,753	16,359	21,754	20,768	18,490	17,267	17,074
Mississippi	107	4,400	15,327	28,833	18,807	16,337	19,062	24,298
Missouri	40	44	47	36	36	45	45	51
Montana	5,960	6,728	7,526	8,074	7,916	8,647	8,420	8,825
Nebraska	2	276	1,898	1,237	635	417	305	293
Ohio	3,156	3,159	3,510	3,543	3,322	2,937	2,828	2,908
Oklahoma	159,913	156,164	154,702	140,690	123,152	124,616	139,299	134,794
Pennsylvania	17,382	17,353	16,750	17,779	15,757	14,118	12,515	12,996
Tennessee	50	24	12	9	10	9	8	10
Texas	483,528	493,209	505,572	483,097	594,343	746,699	754,710	760,215
Utah	4	3	4	--	--	--	--	--
Virginia	--	--	--	--	2	3	4	23
West Virginia	3,580	3,444	3,433	3,574	3,349	3,070	2,879	2,929
Wyoming	21,454	25,711	29,878	32,812	34,253	33,356	36,219	38,977
U.S. TOTAL	1,264,962	1,353,214	1,402,208	1,386,645	1,505,613	1,677,904	1,713,655	1,733,939

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys.

SECTION V. FINANCIAL

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AVERAGE HOURLY EARNINGS-TOTAL MINING AND MANUFACTURING VS. PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING

(Annual Average)

	Petroleum and Natural Gas Extraction					
Year	Total Mining	Total	Crude Petroleum and Natural Gas Fields	Field Service Workers	Total Manufacturing	Petroleum Refining
1947	$1.47	N.A.	$1.40	N.A.	$1.22	$1.57
1948	1.66	N.A.	1.58	N.A.	1.33	1.79
1949	1.72	N.A.	1.69	N.A.	1.38	1.88
1950	1.77	N.A.	1.72	N.A.	1.44	1.94
1951	1.93	N.A.	1.85	N.A.	1.56	2.09
1952	2.01	N.A.	1.98	N.A.	1.65	2.20
1953	2.14	N.A.	2.10	N.A.	1.74	2.33
1954	2.14	N.A.	2.15	N.A.	1.78	2.38
1955	2.20	N.A.	2.20	N.A.	1.86	2.47
1956	2.33	N.A.	2.35	N.A.	1.95	2.66
1957	2.46	N.A.	2.47	N.A.	2.05	2.77
1958	2.47	$2.39	2.54	$2.24	2.11	2.84
1959	2.56	2.43	2.65	2.25	2.19	2.99
1960	2.61	2.46	2.69	2.26	2.26	3.02
1961	2.64	2.53	2.80	2.30	2.32	3.16
1962	2.70	2.60	2.83	2.41	2.39	3.19
1963	2.75	2.66	2.92	2.43	2.46	3.32
1964	2.81	2.65	2.95	2.43	2.53	3.37
1965	2.92	2.74	3.03	2.53	2.61	3.47
1966	3.05	2.87	3.13	2.70	2.72	3.60
1967	3.19	3.03	3.25	2.88	2.83	3.77
1968	3.35	3.22	3.39	3.11	3.01	3.94
1969	3.61	3.43	3.60	3.33	3.19	4.23
1970	3.85	3.57	3.83	3.40	3.36	4.49
1971	4.06	3.75	4.15	3.48	3.57	4.82
1972	4.41	4.00	4.49	3.67	3.81	5.25
1973	4.73	4.29	4.79	3.99	4.08	5.54
1974	5.21	4.82	5.33	4.56	4.41	5.96
1975	5.90	5.34	6.05	5.00	4.81	6.90
1976	6.42	5.76	6.59	5.40	5.19	7.75
1977	6.88	6.23	7.13	5.87	5.63	8.44
1978	7.67	7.01	8.05	6.60	6.17	9.32
1979	8.48	7.73	8.80	7.34	6.69	10.08
1980	9.18	8.55	9.71	8.19	7.27	10.94
1981	10.06	9.49	10.81	9.11	7.98	12.17
1982	10.82	10.32	11.94	9.78	8.50	13.30
1983	11.30	10.69	12.38	9.97	8.84	14.33
1984	11.58	10.66	12.78	9.89	9.17	14.57

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

AVERAGE HOURLY EARNINGS-TOTAL MINING AND MANUFACTURING VS. PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING

(Annual Average)

Year	Total Mining	Petroleum and Natural Gas Extraction: Total	Petroleum and Natural Gas Extraction: Crude Petroleum and Natural Gas Fields	Petroleum and Natural Gas Extraction: Field Service Workers	Total Manufacturing	Petroleum Refining
1985	$11.95	$11.04	$13.31	$10.13	$9.52	$15.25
1986	12.45	11.54	13.74	10.25	9.73	15.32
1987	12.45	11.42	14.04	9.98	9.91	15.72
1988	12.69	11.72	14.44	10.19	10.17	16.20

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

Section V
Table 2

NUMBER OF EMPLOYEES
PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING
(Annual Average in Thousands)

	Petroleum and Natural Gas Extraction		
Year	Crude Petroleum and Natural Gas Fields	Field Service Workers	Petroleum Refining
1947	164.0	N.A.	189.3
1948	173.6	N.A.	196.6
1949	173.1	N.A.	191.6
1950	166.8	N.A.	185.4
1951	169.1	N.A.	198.6
1952	177.2	N.A.	201.6
1953	181.3	N.A.	206.3
1954	184.7	N.A.	203.6
1955	189.0	N.A.	201.3
1956	192.3	N.A.	200.8
1957	194.5	N.A.	198.9
1958	192.4	135.0	190.4
1959	185.4	144.2	181.4
1960	178.2	131.1	177.2
1961	171.3	131.8	168.4
1962	167.6	130.4	160.5
1963	163.8	125.4	153.7
1964	160.4	130.7	149.6
1965	156.6	130.5	148.1
1966	152.5	129.2	148.2
1967	149.7	126.2	147.9
1968	148.1	127.5	150.1
1969	145.8	134.1	144.7
1970	144.2	125.9	153.7
1971	142.5	121.7	152.7
1972	142.7	125.5	152.3
1973	142.1	135.6	149.9
1974	148.5	156.0	155.4
1975	159.5	176.2	154.2
1976	165.0	195.3	157.1
1977	174.8	229.7	159.5

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

PETROLEUM INDUSTRY EMPLOYMENT(1)
(In Thousands)

Year	Extraction(2)	Refining	Paving and Roofing	Oil Pipelines	Gas Production and Distribution	Wholesale	Retail	Total
1977	381.4	159.5	31.6	18.5	158.8	229.7	628.7	1,608.2
1978	429.3	164.1	32.3	19.6	163.5	229.4	628.0	1,666.2
1979	474.2	165.2	32.6	20.1	167.1	225.4	576.9	1,661.5
1980	559.7	154.8	31.0	21.3	168.0	223.9	560.8	1,719.5
1981	692.1	172.8	28.9	21.8	174.0	231.5	562.2	1,883.3
1982	708.3	164.2	25.0	21.3	176.9	222.6	559.0	1,877.3
1983	597.8	158.2	26.3	20.1	173.5	210.9	556.2	1,743.0
1984	606.5	151.1	26.7	19.1	173.2	208.3	574.7	1,759.6
1985	582.9	141.4	26.3	18.7	174.8	205.9	588.5	1,738.5
1986	450.0	131.1	26.1	18.1	167.4	200.5	596.0	1,589.7
Jan.	557.8	134.3	23.6	18.5	171.6	200.6	582.7	1,688.9
Feb.	535.4	133.5	23.3	18.2	170.1	200.1	579.9	1,660.5
Mar.	506.5	133.5	24.4	18.0	167.7	200.1	583.9	1,634.1
Apr.	471.3	133.1	26.2	18.0	166.2	199.9	587.9	1,602.6
May	444.6	132.8	27.4	17.9	166.7	200.9	594.1	1,584.4
Jun.	434.4	133.0	27.6	18.4	167.3	201.6	601.0	1,583.4
Jul.	430.5	132.5	27.7	18.7	169.9	202.9	604.4	1,586.6
Aug.	417.4	131.2	28.0	18.4	169.3	203.1	608.4	1,575.8
Sep.	404.5	129.0	27.6	18.1	163.4	201.0	505.0	1,548.6
Oct.	402.9	127.7	27.0	17.9	164.4	199.4	600.5	1,539.8
Nov.	401.8	127.1	26.1	17.8	166.2	199.2	600.4	1,537.8
Dec.	398.2	125.2	23.9	17.6	165.8	197.9	604.3	1,532.9
1987	405.2	126.7	26.3	18.2	165.7	198.4	609.6	1,550.1
Jan.	393.7	126.0	23.1	17.8	164.7	196.6	603.9	1,525.8
Feb.	388.8	125.7	23.3	17.8	164.0	196.4	600.8	1,516.8
Mar.	386.3	126.0	24.3	17.9	163.8	195.7	599.8	1,513.8
Apr.	389.5	125.8	25.9	17.8	164.0	196.1	602.3	1,521.4
May	393.8	126.2	27.5	18.0	164.6	197.0	609.3	1,536.4
Jun.	400.5	127.3	28.2	18.5	167.8	198.6	614.8	1,555.7
Jul.	406.7	127.8	27.9	18.7	168.9	199.6	618.2	1,567.8
Aug.	412.4	127.8	28.2	18.7	168.5	200.1	618.0	1,573.7
Sep.	416.6	127.0	28.2	18.4	166.1	199.6	612.9	1,568.8
Oct.	423.8	127.0	27.8	18.3	165.5	199.6	610.4	1,572.4
Nov.	424.3	127.1	26.6	18.2	165.1	200.5	610.4	1,572.2
Dec.	425.4	127.2	24.8	18.3	165.4	201.4	614.4	1,576.9

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(1) Total employment by establishment--includes production workers, clerical and white collar employees.
(2) Includes employees of production companies and oil field service companies.

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings"

PETROLEUM INDUSTRY EMPLOYMENT(1)
(In Thousands)

Year	Extraction(2)	Refining	Paving and Roofing	Oil Pipelines	Gas Production and Distribution	Wholesale	Retail	Total
1988	417.1	127.8	26.2	16.5	167.0	203.9	631.0	1,589.4
Jan.	418.0	127.4	23.4	17.9	165.2	200.1	612.9	1,564.9
Feb.	413.9	125.7	23.3	15.9	164.5	200.2	615.4	1,558.9
Mar.	414.7	125.3	24.0	15.9	164.7	200.8	618.5	1,563.9
Apr.	416.2	125.3	26.3	15.9	165.1	201.4	622.2	1,572.4
May	418.2	127.4	27.1	16.1	166.2	202.6	630.6	1,588.2
Jun.	421.3	128.7	27.8	16.7	169.7	204.4	636.8	1,605.4
Jul.	423.2	129.5	27.9	17.0	170.8	206.3	641.4	1,616.1
Aug.	423.6	129.7	27.8	16.9	170.5	206.3	643.4	1,618.2
Sep.	418.6	128.8	27.8	16.4	167.2	206.1	638.5	1,603.4
Oct.	415.9	128.5	27.7	16.3	167.0	205.8	637.7	1,598.8
Nov.	412.4	128.6	26.9	16.2	166.8	205.5	636.9	1,593.3
Dec.	410.0	128.3	24.6	16.3	166.2	206.9	637.6	1,589.9
1989								
Jan.	404.4	128.0	22.3	16.3	166.1	206.0	634.9	1,578.0
Feb.	400.2	128.3	22.0	16.2	165.4	207.4	634.4	1,573.9
Mar.	401.8	128.5	23.0	16.2	165.3	208.9	637.5	1,581.2

(1) Total employment by establishment--includes production workers, clerical and white collar employees.
(2) Includes employees of production companies and oil field service companies.

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings".

Section V
Table 3

SOURCES OF CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Millions of dollars)

Year	Internal Funds	External Funds	Total Funds
1947	$ 2,221	$ 682	$ 2,903
1948	3,250	592	3,842
1949	2,971	641	3,612
1950	3,285	159	3,444
1951	3,847	316	4,163
1952	4,092	831	4,923
1953	4,591	520	5,111
1954	4,897	353	5,250
1955	5,429	520	5,949
1956	6,351	1,222	7,573
1957	6,536	1,211	7,747
1958	5,806	970	6,776
1959	6,211	241	6,452
1960	6,401	245	6,646
1961	6,892	649	7,541
1962	7,280	677	7,957
1963	7,710	925	8,635
1964	7,905	990	8,895
1965	8,681	1,196	9,877
1966	10,085	2,032	12,117
1967	10,682	2,791	13,473
1968	11,280	4,015	15,295
1969	11,715	2,998	14,713
1970	14,333	4,156	18,489
1971	15,132	5,059	20,191
1972	16,164	4,632	20,796
1973	23,211	4,786	27,997
1974	32,510	6,232	38,742
1975	23,931	10,129	34,060
1976	28,254	10,310	38,564
1977	33,427	8,678	42,105
1978	38,410	4,930	43,340
1979	62,828	8,568	71,396
1980	70,721	11,900	82,621
1981	64,930	16,585	81,515
1982	67,167	15,430	82,597
1983	66,962	8,707	75,669
1984	48,811	22,347	71,158

Source: The Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies"

Section V
Table 4

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Autos and Trucks	20.7	25.4	30.2	32.5	17.6	18.7	19.4	18.0	29.8	14.6	16.4	9.1	16.9	16.9	13.2
Drugs Soaps, etc.	20.7	21.3	16.2	21.4	17.7	13.7	15.1	14.8	17.6	19.9	21.5	21.9	22.0	20.4	18.4
Office Equip.	26.7	24.3	18.4	19.3	16.9	14.3	13.2	14.7	16.7	17.5	18.0	13.7	14.4	14.2	16.1
Glass Products	17.6	15.5	19.8	24.4	15.2	14.6	14.9	16.2	20.6	17.7	15.6	11.9	16.7	13.4	11.1
Elect.Equip.& Electronics	19.9	20.3	17.3	22.5	16.0	14.8	14.9	13.9	13.1	11.8	13.9	12.4	14.4	11.4	10.0
Auto Parts	23.4	22.9	18.9	22.7	15.7	13.1	13.2	10.4	15.9	12.9	12.1	7.4	13.1	7.3	6.8
Chemical Prod.	17.2	16.9	17.1	21.4	16.3	13.5	13.2	14.4	17.5	15.5	14.0	11.1	14.7	12.4	11.8
Household Equip.	33.2	26.6	15.4	23.0	12.9	12.5	10.7	10.3	12.2	12.7	9.6	7.7	14.1	10.0	9.2
Aircraft and Space	-	2.9	8.2	14.3	9.1	17.9	20.1	27.1	24.3	21.4	20.0	14.1	9.0	6.6	4.4
Soft Drinks	22.6	17.9	16.5	15.6	12.6	12.0	12.6	12.4	14.3	14.3	14.5	14.4	17.1	16.8	15.6
Other Stove and Clay Prod.	17.8	18.2	13.7	18.5	14.9	12.5	11.8	13.2	16.5	16.0	13.2	11.9	14.6	12.1	11.1
Lumber	33.1	23.1	10.7	17.0	16.0	11.4	10.3	9.7	14.0	12.6	9.5	9.2	11.7	7.5	6.6
Paper and Allied Prod.	23.7	19.6	12.8	17.1	16.1	12.0	12.2	12.4	14.0	14.2	10.6	9.3	10.5	9.1	8.1
Paint and Allied Prod.	19.0	13.1	10.3	17.1	12.9	10.7	12.7	13.6	16.3	18.0	15.8	12.8	12.5	13.0	12.5
Banking	20.4	21.0	17.8	15.9	12.3	12.2	12.0	11.4	12.0	12.2	12.5	11.7	11.5	11.6	9.7
Machinery	17.0	18.6	12.4	14.2	14.9	14.1	12.9	11.7	11.6	15.2	13.7	7.9	9.8	9.9	8.9
Rubber and Allied Prod.	16.0	13.4	8.7	15.9	16.4	13.4	14.0	11.9	15.3	13.8	12.4	10.6	12.9	10.3	10.2
Printing and Publ.	19.9	14.3	14.7	14.5	11.8	11.0	10.5	10.9	13.0	13.8	14.0	11.3	12.8	13.9	11.9
Petroleum	15.9	21.6	13.6	15.1	16.7	14.5	14.7	13.8	14.1	14.6	13.7	9.9	10.0	10.3	10.4
Other Food Prod.	21.2	16.9	14.0	15.4	11.8	10.0	11.1	11.5	11.8	11.7	11.5	11.4	11.8	11.4	12.8
Other Metal Prod.	15.7	17.1	11.1	16.4	14.9	11.4	11.5	11.1	12.8	12.5	12.0	8.9	11.4	6.8	7.3
Brewing	26.4	18.4	22.1	15.1	11.6	10.8	10.8	8.2	8.7	7.7	7.4	6.8	7.8	7.7	9.5
Building,Heat,Plumb. Equip.	19.6	20.1	12.6	17.8	13.8	10.9	10.2	9.8	11.3	11.3	9.4	8.1	9.1	5.3	4.6
Dairy Prod.	15.2	13.0	15.5	13.9	11.0	10.4	11.2	12.4	12.1	12.4	11.9	11.9	11.8	11.3	11.0
Non Ferrous Metals	14.8	15.3	8.0	14.5	13.5	11.5	11.0	10.8	16.6	17.2	9.7	6.8	8.9	7.2	6.8
Furniture and Fixtures	17.1	18.3	10.9	18.7	13.1	10.1	9.8	9.5	12.9	14.2	7.8	8.6	10.5	7.9	7.1
Iron and Steel	11.3	13.9	11.6	15.3	12.3	8.8	11.6	9.4	15.2	13.9	13.2	8.2	8.4	7.8	6.4
Total Manufacturing	17.0	18.2	13.8	17.1	14.4	11.3	12.7	12.3	14.9	13.8	12.9	9.8	11.7	10.6	9.9
Total Mining	16.0	20.5	12.0	13.2	13.0	10.1	7.9	8.2	13.0	13.8	9.6	7.3	7.8	8.0	8.3
Total Trade	18.3	18.2	13.2	14.8	11.5	10.1	9.9	9.9	10.9	11.4	10.8	10.5	11.9	10.7	10.2

Source: First National City Bank

Section V
Table 4a

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Autos & Trucks	19.4	19.6	19.9	23.4	17.8	12.0	16.6	13.8	5.8	15.0	17.2	17.6	6.1	5.7
Drugs & Medicine	17.8	18.7	19.8	22.1	22.5	20.3	19.8	17.7	18.8	19.0	19.8	21.4	21.0	20.4
Soap, Cosmetics	17.0	16.9	17.6	16.8	17.9	19.4	18.9	18.6	18.7	19.3	20.2	20.2	17.9	18.0
Office Eqpmt.. Computers	17.2	18.0	17.9	18.7	18.1	17.8	19.0	17.4	13.9	12.5	13.8	16.7	16.3	15.9
Glass Products	11.6	11.6	12.1	13.5	12.7	11.1	11.9	12.2	9.0	11.1	12.5	12.9	10.6	9.8
Electr.Eqpmt.& Electronics	11.3	10.7	11.3	14.8	16.7	15.4	14.1	13.0	10.1	10.7	13.6	15.3	13.1	12.7
Auto Parts	10.2	11.4	12.0	13.4	14.0	11.4	12.6	13.0	8.9	10.4	13.5	14.4	10.4	9.6
Chemical Products	12.3	13.2	14.7	15.4	14.6	11.4	11.7	11.4	9.5	9.7	11.3	15.2	18.8	15.8
Household Appliances	11.5	12.8	13.9	15.0	15.0	14.7	14.0	13.5	11.9	12.1	15.4	15.6	5.3	6.2
Aerospace	12.9	11.7	12.9	15.4	15.7	13.4	13.9	11.4	6.7	6.3	8.9	11.7	13.8	11.7
Soft Drinks	16.6	17.9	20.7	21.1	22.0	23.3	22.7	22.5	22.7	23.1	22.1	22.0	19.0	20.0
Other Stone & Clay Prod.	9.0	9.1	10.6	9.9	9.2	7.3	8.9	9.3	7.0	8.7	10.8	11.9	9.1	8.2
Lumber & Wood Prod.	7.6	8.1	10.9	11.5	11.0	9.4	14.1	15.2	10.2	11.2	12.6	20.8	15.9	10.0
Paper & Allied Prod.	9.3	9.2	10.3	10.5	11.8	9.5	10.7	10.3	7.4	5.6	8.8	14.6	18.3	12.7
Paint & Allied Prod.	11.6	12.0	14.4	14.1	14.3	11.6	11.5	10.2	6.2	8.1	10.6	10.3	11.7	9.0
Baking	9.9	11.0	11.3	11.9	13.9	15.7	13.4	7.9	11.0	12.8	11.8	9.4	12.0	17.0
Machinery	9.9	9.7	11.9	14.4	16.9	14.7	13.5	12.9	10.5	10.3	10.6	12.7	12.2	11.6
Rubber & Allied Prod.	9.4	9.9	11.5	11.8	12.8	10.8	12.7	11.1	7.6	9.8	11.6	11.5	9.7	7.8
Printing & Publishing	10.5	12.4	14.0	16.9	17.9	15.4	14.9	14.8	12.5	12.6	13.8	15.4	14.5	12.5
Petroleum Prod'n Refng.	10.6	11.5	11.6	11.9	12.6	12.8	13.1	11.9	11.0	11.2	10.8	15.6	19.6	13.9
Building,Heat. Plumb.Equip.	6.3	6.4	8.2	10.6	12.0	11.3	11.3	8.5	7.0	8.4	12.1	11.6	14.2	12.3
Other Food Products	12.5	12.1	12.7	12.6	13.3	12.3	12.7	12.1	12.8	12.3	14.2	14.8	14.4	14.1
Other Metal Products	9.0	9.3	10.4	12.9	14.1	13.8	13.3	12.5	10.4	8.9	10.4	12.9	14.0	13.0
Brewing	8.9	9.1	10.1	11.1	13.4	12.2	13.2	13.2	16.0	15.8	14.8	13.1	12.3	10.3
Dairy Products	10.5	11.2	12.2	12.5	12.6	11.8	11.7	11.8	12.0	12.6	12.8	13.0	13.2	14.3
Non Ferrous Metals	7.1	7.1	9.0	11.8	15.7	11.4	11.1	12.5	10.6	5.0	7.1	11.2	15.1	7.4
Furniture & Fixtures	7.8	8.1	11.1	13.0	14.3	11.9	11.3	12.4	8.4	11.9	12.5	13.0	8.2	7.0
Iron & Steel	5.4	7.3	9.2	9.6	9.4	7.4	8.5	7.4	4.6	4.6	6.1	9.8	17.1	10.0
Total Manufacturing	10.9	11.6	12.7	13.9	14.2	12.6	13.3	12.4	10.8	10.8	12.1	14.9	15.2	12.6
Total Mining	8.6	9.1	10.4	12.2	13.9	16.2	15.0	12.6	8.5	8.5	10.7	16.6	24.5	16.1
Total Trade	10.3	10.4	12.1	13.2	13.7	13.2	14.1	13.5	11.7	11.7	11.8	12.7	13.5	13.0

Source: First National City Bank

Section V
Table 4b

NET INCOME AS A PERCENT OF NET WORTH
PETROLEUM, OTHER SELECTED INDUSTRY GROUPS, TOTAL MANUFACTURING AND TOTAL MINING

INDUSTRIAL GROUPS	1976	1977	1978	1979	1980	1981(p)
Autos & Trucks	18.3	20.8	17.4	10.5	-13.6	-6.0
Drugs & Medicine	20.0	19.2	22.0	22.9	22.2	19.4
Soap, Cosmetics	18.3	19.7	20.9	19.9	19.7	18.1
Office Eqpmt., Computers	17.4	18.8	23.3	20.7	21.2	18.1
Glass Products	17.3	11.5	11.1	14.6	12.9	11.3
Elec.Eqpmt.,& Electronics	16.2	16.7	17.5	17.3	18.7	17.5
Auto Parts	15.3	16.4	17.4	18.2	11.9	16.2
Chemical Products	16.1	14.3	14.9	17.3	16.5	16.7
Household Appliances	17.4	19.4	16.8	16.6	14.3	13.6
Aerospace	13.6	17.4	17.0	21.8	17.7	12.7
Soft Drinks	22.4	22.3	22.3	22.3	20.9	23.0
Other Stone & Clay Prod.	10.6	12.2	17.2	14.5	5.5	10.4
Lumber & Wood Products	15.5	16.0	17.7	20.2	11.0	8.3
Paper & Allied Products	14.8	14.1	14.0	17.4	13.8	14.0
Paint & Allied Products	10.9	8.1	8.8	11.0	12.8	13.4
Baking	16.1	17.8	19.7	17.4	17.4	18.1
Machinery	13.6	15.0	16.5	18.3	14.3	14.4
Rubber & Allied Prod.	7.5	10.0	6.2	6.4	4.2	10.9
Printing & Publishing	13.9	16.8	21.2	19.4	18.5	19.0
Petroleum Prod'n. & Refing.	14.8	14.0	14.5	22.6	25.4	20.2
Building, Heating, Plumbing Equipment	21.0	20.4	21.8	26.0	22.4	18.3
Other Food Products	16.1	16.3	17.6	17.3	17.8	19.1
Other Metal Products	15.0	14.8	13.6	16.5	13.7	13.1
Brewing	11.5	10.5	10.1	12.5	16.0	15.9
Dairy Products	14.7	14.9	15.6	14.8	16.2	14.5
Non Ferrous Metals	8.5	8.0	9.4	18.6	18.5	10.5
Furniture & Fixtures	9.8	8.5	11.6	7.2	9.0	12.8
Iron & Steel	8.7	4.4	9.4	11.7	10.0	12.2
Total Manufacturing	15.0	14.9	15.9	18.4	16.5	15.7
Total Mining	16.5	8.5	8.2	19.8	19.1	19.2
Total Trade	14.7	15.0	15.3	15.7	13.8	13.6

(p) Preliminary

Source: First National City Bank

Section V
Table 5

DOMESTIC AND FOREIGN NET INCOME OF A GROUP OF PETROLEUM COMPANIES
(Millions of Dollars)

	NET INCOME		
Year	U.S.	Foreign	Total
1960	$ 1,887	$ 1,581	$ 3,468
1961	1,958	1,719	3,677
1962	2,044	1,963	4,007
1963	2,392	2,149	4,541
1964	2,556	2,156	4,712
1965	2,927	2,164	5,091
1966	3,438	2,214	5,652
1967	3,727	2,421	6,148
1968	3,913	2,751	6,664
1969	3,774	2,928	6,702
1970	3,609	3,029	6,638
1971	3,372	3,753	7,125
1972	3,526	3,155	6,681
1973	4,008	7,396	11,404
1974	6,119	9,931	16,050
1975	5,623	5,530	11,513
1976	7,165	5,462	12,627
1977	7,420	6,565	13,985
1978	7,968	6,582	14,550
1979	12,237	18,383	30,620
1980	15,073	19,047	34,120
1981	15,916	12,537	28,453
1982	12,831	8,431	21,262
1983	9,573	10,465	20,038
1984	9,191	10,874	20,065
1985	8,289	10,410	18,699

SOURCE: Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies"

Section V
Table 6

WORLD PETROLEUM INDUSTRY CAPITAL AND EXPLORATION EXPENDITURES
UNITED STATES versus FOREIGN
(Millions of U.S. dollars)

	CAPITAL EXPENDITURES			GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS			COMBINED		
Year	United States	Foreign	World Total	United States	Foreign	World Total	United States	Foreign	World Total
1947	2,825	1,225	4,050	250	70	320	3,075	1,295	4,370
1948	3,350	1,600	4,950	300	100	400	3,650	1,700	5,350
1949	3,000	1,925	4,925	325	100	425	3,325	2,025	5,350
1950	2,925	1,500	4,425	300	125	425	3,225	1,625	4,850
1951	3,625	1,700	5,325	400	150	550	4,025	1,850	5,875
1952	4,400	2,350	6,750	500	175	675	4,900	2,525	7,425
1953	5,025	2,550	7,575	575	175	750	5,600	2,725	8,325
1954	5,350	2,725	8,075	600	200	800	5,950	2,925	8,875
1955	5,600	2,950	8,500	625	250	875	6,225	3,200	9,425
1956	6,050	3,975	10,025	700	300	1,000	6,750	4,275	11,025
1957	6,400	5,000	11,400	700	375	1,075	7,100	5,375	12,475
1958	5,300	5,400	10,700	650	400	1,050	5,950	5,800	11,750
1959	5,272	5,775	11,050	650	470	1,120	5,925	6,245	12,170
1960	5,175	5,350	10,525	625	460	1,085	5,800	5,810	11,610
1961	5,100	5,325	10,425	600	420	1,020	5,700	5,745	11,445
1962	5,725	5,385	11,110	575	425	1,000	6,300	5,800	12,100
1963	5,475	5,675	11,150	600	450	1,050	6,075	6,125	12,200
1964	6,100	6,175	12,275	650	480	1,130	6,750	6,655	13,405
1965	6,375	6,800	13,175	610	570	1,180	6,985	7,370	14,355
1966	7,125	7,550	14,675	650	460	1,110	7,775	8,010	15,785
1967	7,650	7,925	15,575	615	575	1,190	8,265	8,500	16,765
1968	8,350	9,550	17,900	715	615	1,330	9,065	10,165	19,230
1969	8,175	10,200	18,375	725	655	1,380	8,900	10,855	19,755
1970	8,225	11,900	20,125	665	675	1,340	8,890	12,575	21,465
1971	7,250	14,550	21,800	715	680	1,395	7,965	15,230	23,195
1972	9,050	15,900	24,950	740	800	1,540	9,790	16,700	26,490
1973	10,640	19,355	29,995	850	850	1,700	11,490	20,205	31,695
1974	16,625	27,075	43,700	1,130	1,055	2,185	17,755	28,130	45,885

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry, Annual

Section V
Table 6a

WORLD PETROLEUM INDUSTRY CAPITAL AND EXPLORATION EXPENDITURES
UNITED STATES versus FOREIGN
(Millions of U.S. dollars)

Year	CAPITAL EXPENDITURES United States	CAPITAL EXPENDITURES Foreign	CAPITAL EXPENDITURES World Total	GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS United States	GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS Foreign	GEOLOGICAL & GEOPHYSICAL EXPENSES & LEASE RENTALS World Total	COMBINED United States	COMBINED Foreign	COMBINED World Total
1947	2,825	1,225	4,050	250	70	320	3,075	1,295	4,370
1975	17,725	31,900	49,625	1,195	1,130	2,325	18,920	33,030	51,950
1976	22,085	34,640	56,725	1,375	1,160	2,535	23,460	35,800	59,260
1977	22,400	39,180	61,580	1,645	1,750	3,395	24,045	40,930	64,975
1978	24,475	43,900	68,375	1,975	2,060	4,035	26,450	45,960	72,410
1979	32,200	49,425	81,625	2,600	2,725	5,325	34,800	52,150	86,950
1980	42,900	62,625	105,525	3,850	3,775	7,625	46,750	66,400	113,150
1981	63,000	75,600	138,600	5,700	4,900	10,600	68,700	80,500	149,200
1982	63,550	75,875	139,425	4,500	5,100	9,600	68,050	80,975	149,025
1983	45,600	66,175	111,775	4,250	4,175	8,425	49,850	70,350	120,200
1984	45,850	60,925	106,775	4,075	4,300	8,375	49,925	65,225	115,150

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry, Annual

Section V
Table 7

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	FUNDS AVAILABLE FROM					FUNDS USED FOR				
Year	Cash Earnings	Long Term Debt Issued	Stock Issued	Other	Total	Capital Expenditures	Dividends	Long Term Debt Repaid	Other	Total
1947	2,160	476	206	61	2,903	2,076	455	62	135	2,728
1948	3,099	476	116	151	3,842	2,591	508	101	366	3,566
1949	2,704	603	38	267	3,612	2,263	603	144	224	3,231
1950	3,080	152	7	205	3,444	1,894	724	224	188	3,030
1951	3,706	258	58	141	4,163	2,540	884	144	103	3,671
1952	3,902	701	130	190	4,923	3,100	939	143	255	4,437
1953	4,379	511	9	212	5,111	3,378	1,019	148	261	4,806
1954	4,592	344	9	305	5,250	3,669	1,041	196	181	5,087
1955	5,200	474	46	229	5,949	3,905	1,163	217	295	5,580
1956	5,866	1,166	56	485	7,573	4,988	1,324	249	484	7,045
1957	6,318	714	497	218	7,747	5,453	1,414	431	219	7,517
1958	5,531	908	62	275	6,776	4,356	1,419	543	174	6,492
1959	5,892	215	26	319	6,452	4,266	1,468	327	209	6,270
1960	6,174	240	5	227	6,646	4,241	1,505	250	326	6,322
1961	6,388	587	62	504	7,541	4,560	1,582	578	332	7,052
1962	6,869	504	173	411	7,957	5,198	1,761	516	603	8,078
1963	7,492	628	297	218	8,635	4,926	1,920	462	695	8,003
1964	7,719	570	420	186	8,895	5,849	2,104	499	653	9,105
1965	8,425	1,085	111	256	9,877	6,421	2,289	407	585	9,702
1966	9,292	1,848	184	793	12,117	7,731	2,479	807	744	11,761
1967	10,080	2,328	463	602	13,473	8,734	2,699	644	548	12,625
1968	10,958	3,622	393	322	15,295	9,690	2,950	992	829	14,461
1969	11,238	2,732	266	477	14,713	9,766	3,140	1,841	798	15,545
1970	13,371	3,725	431	962	18,489	11,393	3,711	1,905	851	17,860
1971	14,389	5,059	(3)	743	20,191	12,511	3,836	2,029	972	19,348
1972	14,377	4,632	(3)	1,787	20,796	12,717	3,774	3,258	751	20,500
1973	20,623	4,786	(3)	2,588	27,997	14,247	4,056	4,023	381	22,707
1974	28,165	6,232	(3)	4,345	38,742	22,270	4,681	4,262	894	32,107

(3) Included in Long Term Debt Issued.
(4) Includes preferred and common stock retired.

Source: The Chase Manhattan Bank, Financial Analysis of a Group of Petroleum Companies

Section V
Table 7a

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	FUNDS AVAILABLE FROM					FUNDS USED FOR				
Year	Cash Earnings	Long Term Debt Issued	Stock Issued	Other(1)	Total	Capital Expenditures	Dividends	Long Term Debt Repaid	Other(2)	Total
1975	22,714	10,129	(3)	1,217	34,060	24,205	4,819	5,316	1,740	36,080
1976	25,828	10,310	(3)	2,426	38,564	26,036	5,208	5,230	829	37,303
1977	29,003	8,678	(3)	4,424	42,105	27,156	5,995	5,954	1,508	40,613
1978	33,184	4,930	(3)	5,226	43,340	28,770	6,781	6,885	1,562	43,998
1979	55,844	8,568	(3)	6,984	71,396	42,229	8,127	8,249	2,473	61,078
1980	66,859	11,900	(3)	5,862	82,821	53,776	10,305	9,728	2,613	76,422
1981	63,207	16,585	(3)	1,723	81,515	63,976	11,068	10,020	4,867	89,931
1982	60,884	14,980	450	6,283	82,597	64,538	11,265	9,281	3,731	90,019
1983	60,256	8,407	300	6,706	75,669	49,521	11,057	7,524	4,507	72,609
1984	57,200	24,900	1,200	4,100	87,400	44,300	10,600	7,000	35,000	96,900
1985	70,200	22,700	500	19,500	113,000	49,800	12,500	27,100	26,800	116,100
1986	54,100	14,800	1,200	22,700	92,700	35,000	13,000	19,000	14,200	81,200

(1) Other includes sales of assets and other transactions and, in 1984-85 includes mergers and acquisitions.
(2) Other includes investments and advancements and preferred and common stock retired.
(3) Included in Long Term Debt Issued.

Source: The Chase Manhattan Bank, Financial Analysis of a Group of Petroleum Companies

Section V
Table 8

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

	PRODUCTION		TRANSPORTATION		REFINERIES & CHEMICAL PLANTS	
Year	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1947	1,750	475	295	310	400	225
1948	2,100	685	310	255	600	405
1949	2,000	770	250	405	420	475
1950	2,100	475	215	430	275	375
1951	2,650	575	285	410	325	400
1952	3,200	890	385	505	470	490
1953	3,525	890	425	610	675	620
1954	3,800	970	325	740	800	585
1955	4,100	1,110	225	655	835	580
1956	4,475	1,725	225	775	825	725
1957	4,525	2,180	345	1,060	950	980
1958	3,650	1,925	350	1,520	725	1,045
1959	3,850	2.030	260	1,720	525	1,020
1960	3,735	1,875	265	1,395	560	1,030
1961	3,525	1,855	230	1,140	685	1,265
1962	4,000	1,665	340	1,205	660	1,415
1963	3,650	1,520	415	1,155	600	1,765
1964	3,960	1,605	340	1,570	675	1,515
1965	3,760	2,025	265	1,510	1,125	1,665
1966	3,770	1,870	300	1,755	1,575	2,435
1967	4,025	1,975	400	1,740	1,600	2,550
1968	4,925	2,535	475	2,280	1,450	2,980
1969	4,750	2,790	400	2,600	1,525	2,995

	MARKETING		OTHER CAPITAL EXPENDITURES		TOTAL CAPITAL EXPENDITURES	
Year	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1947	300	175	80	40	2,825	1,225
1948	225	165	115	90	3,350	1,600
1949	240	215	90	60	3,000	1,925
1950	275	180	60	40	2,925	1,500
1951	300	245	65	70	3,625	1,700
1952	280	375	65	90	4,400	2,350
1953	325	360	75	70	5,025	2,550
1954	350	385	75	45	5,350	2,725
1955	375	535	65	70	5,600	2,950
1956	450	685	75	65	6,050	3,975
1957	475	710	105	70	6,400	5,000
1958	400	745	175	165	5,300	5,400
1959	450	885	190	120	5,275	5,775
1960	475	950	140	100	5,175	5,350
1961	525	930	135	135	5,100	5,325
1962	600	985	125	105	5,725	5,375
1963	650	1,085	160	150	5,475	5,675
1964	850	1,340	275	145	6,100	6,175
1965	1,000	1,430	225	170	6,375	6,800
1966	1,100	1,310	380	180	7,125	7,550
1967	1,250	1,455	375	205	7,650	7,925
1968	1,150	1,515	350	240	8,350	9,550
1969	1,250	1,555	250	260	8,175	10,200

Source: The Chase Manhattan Bank

Section V
Table 8a

SOURCES AND USES OF WORKING CAPITAL OF A GROUP OF PETROLEUM COMPANIES
(Million dollars)

Year	PRODUCTION		TRANSPORTATION		REFINERIES & CHEMICAL PLANTS	
	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1970	4,335	2,895	550	2,915	1,625	3,900
1971	3,385	3,830	675	3,435	1,550	4,740
1972	5,915	4,190	425	4,580	1,350	4,955
1973	7,440	5,485	550	7,230	1,475	4,565
1974	11,450	8,085	1,660	9,760	2,600	7,115
1975	9,380	9,875	3,725	11,510	3,600	8,270
1976	13,460	12,315	3,900	12,350	3,775	7,635
1977	15,180	17,280	2,300	8,060	3,700	10,965
1978	17,650	20,055	1,350	7,380	4,050	13,275
1979	24,600	24,465	1,450	6,575	4,625	14,385
1980	33,100	33,775	2,150	7,725	5,650	16,125
1981	51,700	41,675	1,725	10,300	7,250	18,325
1982	52,275	43,400	1,300	7,650	7,550	19,525
1983	37,275	36,575	1,000	7,725	5,100	17,075
1984	38,050	34,650	975	5,925	4,200	15,700

Year	MARKETING		OTHER CAPITAL EXPENDITURES		TOTAL CAPITAL EXPENDITURES	
	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
1970	1,450	1,770	265	420	8,225	11,900
1971	1,350	2,030	290	515	7,250	14,550
1972	1,100	1,725	260	450	9,050	15,900
1973	850	1,630	325	445	10,640	19,355
1974	650	1,565	325	550	16,625	27,075
1975	650	1,510	370	735	17,725	31,900
1976	625	1,555	325	785	22,085	34,640
1977	775	1,895	445	980	22,400	39,180
1978	950	2,290	475	980	24,475	43,900
1979	975	2,775	550	1,225	32,200	49,425
1980	1,300	3,750	700	1,250	42,900	62,625
1981	1,425	3,775	900	1,525	63,000	75,600
1982	1,400	3,700	1,025	1,600	63,550	75,875
1983	1,375	3,300	850	1,500	45,600	66,175
1984	1,900	3,275	725	1,375	45,850	60,925

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry

Section V
Table 9

ESTIMATED U.S. EXPLORATION & DEVELOPMENT EXPENDITURES CHASE MANHATTAN BANK GROUP AND ALL OTHER COMPANIES

(Millions of Dollars)

Year	Total Exploration and Development Expenditures	Expenditures by Chase Manhattan Group	Expenditures by All Other Companies
1947	$ 1,950	$ 991	$ 959
1948	2,300	1,318	982
1949	2,215	1,217	998
1950	2,325	1,157	1,168
1951	2,975	1,620	1,355
1952	3,625	1,855	1,770
1953	3,975	2,014	1,961
1954	4,300	2,180	2,120
1955	4,675	2,383	2,292
1956	5,075	2,621	2,454
1957	5,100	2,673	2,427
1958	4,225	2,241	1,984
1959	4,350	2,455	1,895
1960	4,200	2,412	1,788
1961	4,000	2,417	1,583
1962	4,425	2,848	1,577
1963	4,125	2,452	1,673
1964	4,450	2,817	1,633
1965	4,210	2,847	1,363
1966	4,250	2,990	1,260
1967	4,365	3,212	1,153
1968	5,390	4,087	1,303
1969	5,250	3,768	1,482
1970	4,775	3,119	1,656
1971	3,900	2,740	1,160
1972	6,480	4,225	2,255
1973	8,140	5,275	2,865
1974	12,355	8,550	3,805
1975	10,250	7,007	3,243
1976	14,510	8,711	5,799
1977	16,500	10,159	6,341
1978	19,300	11,378	7,922
1979	26,750	20,616	6,134

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry and Financial Analysis of a Group of Petroleum Companies

ESTIMATED U.S. EXPLORATION & DEVELOPMENT EXPENDITURES CHASE MANHATTAN BANK GROUP AND ALL OTHER COMPANIES
(Millions of Dollars)

Year	Total Exploration and Development Expenditures	Expenditures by Chase Manhattan Group	Expenditures by All Other Companies
1980	36,200	25,053	11,147
1981	56,475	32,765	23,710
1982	55,400	30,902	24,498
1983	40,875	25,537	15,338
1984	41,450	23,010	17,440

Source: The Chase Manhattan Bank, Capital Investments of the World Petroleum Industry and Financial Analysis of a Group of Petroleum Companies

Section V
Table 10

U.S. ESTIMATED EXPENDITURES FOR EXPLORATION, DEVELOPMENT AND PRODUCTION, MILLION DOLLARS(1)

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Exploration Expenditures									
Drilling and equipping wells	944.2	1,580.5	2,124.2	2,467.1	3,220.8	4,098.3	5,619.2	8,678.6	13,545.7
Acquiring undeveloped acreage	3,552.0	5,774.0	1,614.5	3,024.3	2.579.5	2,885.4	7,036.5	7,899.2	11,188.2
Land dept. leasing and scouting	76.5	90.6	113.4	126.3	164.1	163.6	223.5	294.7	376.2
Geological and geophysical	399.5	567.6	652.8	692.3	833.3	1,028.7	1,218.2	1,871.1	2,823.0
Lease rental	150.7	177.8	204.7	206.7	245.8	285.3	311.6	429.1	600.4
Test Hole contributions	13.8	8.9	16.9	21.7	32.7	24.5	23.0	28.0	34.2
Other, incl. direct overhead	106.0	168.6	242.0	240.6	305.2	393.5	523.5	757.0	999.0
General and administrative	203.6	290.9	341.7	404.8	413.5	488.8	661.7	892.8	1,107.5
TOTAL EXPLORATION(3)	5,446.2	8,658.8	5,310.3	7,183.9	7,794.9	9,367.9	15,617.2	20,830.8	30,674.2
Development Expenditures									
Drilling and equipping wells	1,766.8	2,265.2	3,354.6	4,154.4	5,712.9	6,838.7	7,972.5	10,193.4	16,107.5
Lease equipment	572.2	824.1	1,499.6	1,486.8	1,607.9	2,175.0	2,146.0	3,572.8	4,760.3
Acquiring producing acreage	183.1	474.0	303.4	381.4	382.8	450.1	5,511.3	3,414.6	972.6
Improved recovery programs	352.5	625.4	928.9	378.4	461.4	639.3	528.3	941.2	1,458.2
Other, incl. direct overhead	(2)	(2)	(2)	978.9	672.3	467.5	544.3	712.5	801.6
General and administrative	164.6	224.4	336.1	354.8	375.7	440.1	601.2	744.4	915.6
TOTAL DEVELOPMENT(3)	3,039.3	4,413.1	6,422.6	7,734.8	9,212.9	11,010.7	17,303.6	19,578.9	25,015.7
Producing Expenditures									
Direct operating expenditures	2,593.6	3,246.4	3,952.9	4,507.4	5,277.9	6,152.2	7,295.3	9,461.9	13,505.1
Taxes, excl. income tax	924.6	1,534.1	1,746.1	1,897.9	2,098.9	2,379.0	2,750.4	4,564.9	20,557.5
General and administrative	496.8	601.4	768.8	865.5	905.2	1,069.8	1,181.3	1,709.8	2,244.8
Other indirect expenses	193.5	252.1	358.0	369.1	435.6	393.6	538.6	6,508.7	6,638.6
TOTAL PRODUCTION(3)	4,208.5	5,634.2	6,825.8	7,639.9	8,717.4	9,994.6	11,765.6	22,245.2	42,945.8
TOTAL EXPENDITURES(3)	12,694.2	18,706.1	18,558.7	22,558.7	25,725.1	30,373.2	44,686.4	62,655.0	98,635.7

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(1) Data not available prior to 1973
(2) Included in improved recovery programs before 1976
(3) TOTALS DO NOT ADD DUE TO ROUNDING.

Source: U.S. Department of Commerce, Bureau of Census: Annual Survey of Oil and Gas

Section V
Table 10a

U.S. ESTIMATED EXPENDITURES FOR EXPLORATION, DEVELOPMENT AND PRODUCTION, MILLION DOLLARS(1)

	1982	1983	1984	1985	1986	1987
Exploration Expenditures						
Drilling and equipping wells	12,935.8	7,045	7,363	6,297	3,048	2,373
Acquiring undeveloped acreage	8,163.3	8,052	7,807	4,040	1,335	1,685
Land dept. leasing and scouting	458.0	317	379	381	301	228
Geological and geophysical	2,997.5	2,540	2,619	2,392	1,244	1,194
Lease rental	643.7	586	536	541	383	289
Test Hole contributions	47.2	49	75	16	125	4
Other, incl. direct overhead	1,192.0	N.A.	N.A.	N.A.	N.A.	N.A.
General and administrative	1,420.8	2,491(3)	2,719(3)	2,732(3)	2,032(3)	1,826(3)
TOTAL EXPLORATION(2)	27,858.3	21,080	21,498	16,399	8,468	7,599
Development Expenditures						
Drilling and equipping wells	15,578.0	18,340	18,693	17,411	9,257	7,362
Lease equipment	5,134.6	3,698	4,495	5,029	3,526	2,305
Acquiring producing acreage	1,511.5	N.A.	N.A.	N.A.	N.A.	N.A.
Improved recovery programs	1,943.8	1,062	1,239	1,822	1,140	753
Other, incl. direct overhead	740.2	N.A.	N.A.	N.A.	N.A.	N.A.
General and administrative	950.7	2,068(3)	2,129(3)	2,974(3)	2,431(3)	1,744(3)
TOTAL DEVELOPMENT (2)	25,858.8	25,168	26,556	27,236	16,354	12,164
Producing Expenditures						
Direct operating expenditures	14,405.3	14,457	14,829	18,233	14,720	13,592
Taxes, excl. income tax	14,008.3	16,860	14,895	11,426	4,317	3,941
General and administrative	3,047.8	N.A.	N.A.	N.A.	N.A.	N.A.
Other indirect expenses	6,605.8	4,358(4)	4,187(4)	4,490(4)	4,192	4,550
TOTAL PRODUCTION(2)	38,067.2	35,675	33,911	34,149	23,218	22,083
TOTAL EXPENDITURES(2)	91,784.3	81,923	81,965	77,784	48,040	41,846

(1) Data not available prior to 1973
(2) Totals may not add due to rounding.
(3) Includes Other, including direct overhead.
(4) Includes general and administrative.

Source: 1982--U.S. Department of Commerce, Bureau of Census: Annual Survey of Oil and Gas.
1983-1987--American Petroleum Institute: Survey of Oil and Gas Expenditures, Annual.

Section V
Table 11

ENVIRONMENTAL PROTECTION EXPENDITURES OF THE PETROLEUM INDUSTRY WITHIN THE U.S.(1)

(Millions of Dollars)

YEAR	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
TOTAL EXPENDITURES														
1. Air...............	$125	$167	$187	$231	$320	$571	$550	$737	$932	$1,039	$1,216	$1,188	$1,349	$1,616
2. Water.............	146	191	205	224	303	415	379	402	530	629	822	950	884	1,001
3. Land and other...	-	-	-	-	60	101	91	100	150	456	336	383	194	203
TOTAL............	$271	$358	$392	$455	$683	$1,087	$1,020	$1,239	$1,612	$2,124	$2,374	$2,521	$2,427	$2,820
CAPITAL EXPENDITURES														
1. Air...............	$69	$100	$112	$145	$181	$391	$305	$436	$527	$601	$536	$339	$429	$561
2. Water.............	79	114	128	136	163	224	184	194	271	356	411	434	340	394
3. Land and other...	-	-	-	-	34	57	51	52	97	396	269	184	89	92
TOTAL............	$148	$214	$240	$281	$378	$672	$540	$682	$895	$1,353	$1,216	$957	$858	$1,047
ADMINISTRATIVE, OPERATING, AND MAINTENANCE EXPENDITURES														
1. Air...............	$43	$50	$53	$62	$108	$143	$198	$251	$352	$389	$635	$792	$864	$997
2. Water.............	57	66	75	84	136	185	187	201	249	262	401	502	532	594
3. Land and other...	-	-	-	-	24	41	37	43	50	55	63	197	101	106
TOTAL............	$100	$116	$128	$146	$268	$369	$422	$495	$651	$706	$1,099	$1,491	$1,497	$1,697
RESEARCH AND DEVELOPMENT EXPENDITURES														
1. Air...............	$13	$17	$22	$24	$31	$37	$47	$50	$53	$49	$45	$57	$56	$58
2. Water.............	10	11	2	4	4	6	8	7	10	11	10	14	12	13
3. Land and other...	-	-	-	-	2	3	3	5	3	5	4	2	4	5
TOTAL............	$23	$28	$24	$28	$37	$46	$58	$62	$66	$65	$59	$73	$72	$76

(1) Totals reported are sums of the expenditures reported to API, not total expenditures of the industry.

Source: American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry 1971-1980

ENVIRONMENTAL PROTECTION EXPENDITURES OF THE PETROLEUM INDUSTRY WITHIN THE U.S.(1)

(Millions of Dollars)

YEAR	1980	1981	1982	1983	1984
TOTAL EXPENDITURES					
1. Air..............	$2,184	$2,311	$2,553	$2,014	$1,870
2. Water............	1,299	1,786	1,705	1,552	1,572
3. Land and other...	357	516	551	439	504
TOTAL...........	$3,840	$4,613	$4,809	$4,005	$3,946
CAPITAL EXPENDITURES					
1. Air..............	$728	$711	$932	$497	$420
2. Water............	527	804	745	627	595
3. Land and other...	183	273	282	178	211
TOTAL...........	$1,438	$1,788	$1,959	$1,302	$1,226
ADMINISTRATIVE, OPERATING AND MAINTENANCE EXPENDITURES					
1. Air..............	$1,392	$1,538	$1,554	$1,457	$1,395
2. Water............	754	960	933	901	953
3. Land and other...	165	231	248	243	278
TOTAL...........	$2,311	$2,729	$2,735	$2,601	$2,626
RESEARCH AND DEVELOPMENT EXPENDITURES					
1. Air..............	$64	$62	$67	$60	$55
2. Water............	18	22	27	18	15
3. Land and other...	9	12	21	102	94
TOTAL...........	$91	$96	$115	$102	$115

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(1) Totals reported are sums of the expenditures reported to API, not total expenditures of the industry.

Source: American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry

Section V
Table 12

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976
TOTAL REVENUE	$ 58,091.3	$ 64,115.8	$ 69,511.4	$ 77,164.3	$ 83,835.9	$ 104,494.0	$ 184,306.2	$ 191,788.1	$ 217,055.1
DEDUCTIONS:									
Payroll and Benefits	6,196.8	6,775.4	7,276.0	8,246.9	8,863.0	9,430.2	10,839.6	12,689.6	13,610.2
Depreciation, Depletion and Amortization	3,948.1	4,234.1	4,637.5	4,971.7	5,240.6	5,796.5	6,744.0	7,619.5	7,621.9
Interest	722.7	948.2	1,105.1	1,224.7	1,301.1	1,414.9	1,619.9	1,657.9	1,968.9
Other Costs and Expenses	33,289.1	37,444.2	40,776.1	44,440.3	48,781.0	60,572.5	123,059.6	130,265.3	154,729.8
Total Taxes	8,368.1	9,144.5	10,367.0	12,415.8	13,858.6	18,240.8	29,357.8	30,111.1	28,151.7
TOTAL DEDUCTIONS	$52,524.8	$58,546.4	$64,161.7	$71,299.4	$ 78,044.3	$ 95,454.9	$171,620.9	$182,343.4	$206,082.5
NET INCOME	$5,571.9	$5,389.2	$5,551.6	$5,669.2	$ 5,533.6	$ 9,081.5	$ 12,650.9	$ 9,442.2	$ 10,990.3

Due to mergers, the number of companies used in the sample has decreased from 23 to 19. Based on this new sample, all numbers for previous years have been revised. The companies included in current sample are:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corporation
Ashland Oil, Inc.
Atlantic Richfield Co.
Chevron Corporation
Diamond Shamrock Corp.
Exxon Corporation
Kerr-McGee Corporation
Mobil Corporation
Murphy Oil Corporation
Occidental Petroleum Corp.
Pennzoil Company
Phillips Petroleum Corp.
Shell Oil Company
Standard Oil Coompany (Ohio)
Sun Company, Inc.
Texaco Inc.
Unocal Corporation

Source: Financial Trends of Leading U.S. Oil Companies, 1968-1983, API, Discussion Paper #017R, October 1987

Section V
Table 12a

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1977	1978	1979	1980	1981	1982	1983	1984	1985
TOTAL REVENUE	$243,603.8	$266,411.2	$352,301.5	$466,142.4	$518,894.8	$472,774.3	$430,184.9	$415,621.8	$405,033.1
DEDUCTIONS:									
Payroll and Benefits	15,086.2	17,137.3	20,581.6	25,282.4	28,329.5	30,003.1	29,737.2	29,2[illegible].4	28,733.5
Depreciation, Depletion and Amortization	8,750.9	10,507.3	12,259.2	14,324.7	17,339.9	19,807.4	21,520.2	23,351.7	24,804.2
Interest	2,891.2	3,516.7	3,796.2	4,012.7	5,431.7	5,463.5	5,380.0	7,213.9	8,916.5
Other Costs and Expenses	173,163.0	187,353.0	251,037.4	333,199.4	372,629.4	452,627.4	298,969.5	286,568.8	280,561.4
Total Taxes	32,186.8	35,226.2	42,876.5	61,463.2	69,011.5	57,125.9	54,028.0	51,406.3	48,270.0
TOTAL DEDUCTIONS	$232,078.1	$253,740.5	$330,551.4	$438,482.4	$492,742.0	$452,627.4	$409,634.9	$397,782.1	$391,285.6
NET INCOME	$ 11,507.2	$ 12,680.4	$ 21,759.1	$ 27,664.6	$ 26,152.8	$ 20,182.4	$ 20,662.6	$ 17,839.7	$ 13,988.5

Due to mergers, the number of companies used in the sample has decreased from 23 to 19. Based on this new sample, all numbers for previous years have been revised. The companies included in current sample are:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corporation
Ashland Oil, Inc.
Atlantic Richfield Co.
Chevron Corporation
Diamond Shamrock Corp.
Exxon Corporation
Kerr-McGee Corporation
Mobil Corporation
Murphy Oil Corporation
Occidental Petroleum Corp.
Pennzoil Company
Phillips Petroleum Corp.
Shell Oil Company
Standard Oil Company (Ohio)
Sun Company, Inc.
Texacp Inc.
Unocal Corporation

SOURCE: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017R, October 1968.

SUMMARY FINANCIAL DATA FOR LEADING U.S. OIL COMPANIES
(Millions of Dollars)

	1986	1987
TOTAL REVENUE	$304,588.6	$334,801.3
DEDUCTIONS:		
Payroll and Benefits	26,654.0	23,383.2
Depreciation, Depletion and Amortization	25,655.6	25,098.8
Interest	8,771.4	8,520.8
Other Costs and Expenses	198,966.4	228,398.8
Total Taxes	33,883.5	38,795.7
TOTAL DEDUCTIONS	293,930.9	324,197.3
NET INCOME	$10,613.6	$10,666.3

The companies included in this sample include:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corporation
Ashland Oil, Inc.
Atlantic Richfield Co.
Chevron Corporation
Diamond Shamrock Corp.
Exxon Corporation
Kerr-McGee Corporation
Mobil Corporation
Murphy Oil Corporation
Occidental Petroleum Corp.
Pennzoil Company
Phillips Petroleum Corp.
Shell Oil Company
Standard Oil Co. (Ohio)
Sun Company, Inc.
Texaco Inc.
Unocal Corporation

Source: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017, October 1988.

Section V
Table 13

CAPITAL EXPENDITURES OF LEADING U.S. OIL COMPANIES
(Billions of Dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
TOTAL												
U.S.	6.2	6.2	6.2	5.7	6.2	7.3	12.8	13.6	15.4	16.0	16.0	20.5
World	9.6	9.7	9.6	9.7	10.1	12.0	18.9	20.1	21.3	22.5	24.0	30.6
EXPLORATION & PRODUCTION												
U.S.	3.2	3.0	2.7	2.4	3.2	4.2	7.7	6.5	8.0	8.4	9.1	13.1
World	4.8	4.5	3.9	3.7	4.7	6.0	10.7	10.2	11.5	12.7	14.7	19.8
REFINING, MARKETING, TRANSPORTATION												
U.S.	1.9	2.2	2.6	2.6	2.2	2.0	3.2	4.7	4.2	3.0	2.9	3.5
World	3.4	4.0	4.6	5.0	4.3	4.8	6.0	7.1	6.1	4.9	4.7	5.9
TOTAL PETROLEUM												
U.S.	5.1	5.2	5.3	5.0	5.4	6.2	10.9	11.2	12.2	11.4	12.0	16.6
World	8.2	8.5	8.5	8.7	9.0	10.8	16.7	17.3	17.6	17.6	19.4	25.7
CHEMICALS												
U.S.	0.6	0.5	0.5	0.3	0.4	0.4	0.9	1.4	2.1	2.6	2.2	2.0
World	0.8	0.6	0.6	0.5	0.5	0.5	1.1	1.6	2.4	2.7	2.3	2.0
PETROLEUM & CHEMICALS												
U.S.	5.7	5.7	5.8	5.3	5.8	6.6	11.8	12.6	14.3	14.0	14.2	18.6
World	9.0	9.1	9.1	9.2	9.5	11.3	17.8	18.9	20.0	20.3	21.8	28.0
OTHER ENERGY												
U.S.	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.6	0.9	0.9	0.9
World	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.7	1.0	1.0	1.3
TOTAL ENERGY												
U.S.	5.9	5.9	6.0	5.5	6.0	6.8	12.3	13.2	14.9	14.9	15.1	19.5
World	9.2	9.3	9.3	9.4	9.7	11.5	18.4	19.6	20.7	21.3	22.8	29.3
OTHER												
U.S.	0.3	0.3	0.2	0.2	0.2	0.5	0.5	0.4	0.5	1.1	0.9	1.0
World	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.5	0.6	1.2	1.2	1.3

Source: Financial Trends of Leading U.S. Oil Companies 1968-1983, API, Discussion Paper #017, October 1984

CAPITAL EXPENDITURES OF LEADING U.S. OIL COMPANIES
(Billions of Dollars)

	1980	1981	1982	1983	1984	1985	1986	1987
TOTAL								
U.S.	27.6	39.4	35.4	28.4	30.3	28.1	17.6	17.0
World	40.7	53.5	49.8	40.2	41.0	39.4	25.4	25.8
EXPLORATION & PRODUCTION								
U.S.	17.5	26.3	22.5	18.9	21.7	19.8	10.5	9.6
World	26.1	35.0	32.1	26.7	28.8	27.3	15.5	15.7
REFINING, MARKETING, TRANSPORTATION								
U.S.	4.3	6.4	6.1	5.1	4.9	4.6	3.9	4.1
World	7.5	9.6	8.8	7.0	6.7	6.6	5.4	5.8
TOTAL PETROLEUM								
U.S.	21.8	32.7	28.6	24.0	26.6	24.4	14.4	13.7
World	33.6	44.6	40.9	33.7	35.5	33.9	20.9	21.5
CHEMICALS								
U.S.	2.5	2.6	2.0	1.1	1.0	1.3	1.2	1.2
World	2.5	2.6	2.0	1.7	1.4	1.5	1.5	1.6
PETROLEUM & CHEMICALS								
U.S.	24.3	35.3	30.6	25.1	27.6	25.7	15.6	14.9
World	36.5	48.1	43.9	35.4	36.9	35.4	22.4	23.1
OTHER ENERGY								
U.S.	1.4	1.6	2.3	1.0	1.0	0.6	0.5	0.5
World	1.9	2.4	3.0	2.1	1.6	1.6	1.2	0.9
TOTAL ENERGY								
U.S.	25.7	36.9	32.9	26.1	28.6	26.3	16.1	15.4
World	38.4	50.5	46.9	37.6	38.5	37.0	23.6	24.0
OTHER								
U.S.	1.9	2.5	2.5	2.3	1.7	1.8	1.5	1.6
World	2.3	3.0	2.9	2.7	2.5	2.4	1.8	1.8

Source: Financial Trends of Leading U.S. Oil Companies 1968-1987, API, Discussion Paper #017R, October 1988.

Section V
Table 14

NET INCOME AS A PERCENT OF STOCKHOLDERS' EQUITY OIL AND NON-OIL COMPANIES

Year	API-Sample Companies(1)	Non-Petroleum Manufacturing(2)
1968	12.5	14.7
1969	11.3	13.8
1970	10.9	10.0
1971	10.5	11.0
1972	9.8	12.8
1973	15.0	14.5
1974	18.6	13.2
1975	12.7	11.6
1976	13.8	14.0
1977	13.3	14.1
1978	13.5	14.8
1979	20.7	15.1
1980	22.5	12.2
1981	18.5	12.9
1982	13.1	9.7
1983	12.8	11.7
1984	11.4	14.1
1985	9.9	10.8
1986	7.3	11.4
Median	12.8	12.9

(1) Net income as a percent of average stockholders' equity
(2) Net income as a percent of average stockholders' equity. Calculations based on Standard & Poor's Compustat data base, All Industrial Aggregate excluding non-manufacturing (e.g., retail) and petroleum industry sectors. The median number of non-oil comopanies over the period was 747; the range was 694-820.

* Due to mergers, the number of coompanies used in the sample has decreased from 23 to 19. Based on this new sample, many numbers for previous years have been revised. The companies included in current sample are:

Amerada Hess Corporation
American Petrofina, Inc.
Amoco Corp.
Ashland Oil, Inc.
Atlantic Richfield Co.
Chevron Corp.
Diamond Shamrock Corp.
Exxon Corporation
Kerr-McGee Corp.
Mobil Corp.
Murphy Oil Corp.
Occidental Petroleum
Pennzoil Co.
Phillips Petroleum Corp.
Shell Oil Co.
Standard Oil (Ohio)
Sun Co., Inc.
Texaco Inc.
Unocal Corp.

Source: Financial Trends of Leading U.S. Oil Companies 1968-1986, API, Discussion Paper #017R, October 1987

Section V
Table 15

WINDFALL PROFITS TAX
(Millions of Dollars)

Quarter Ending	Tax Before Adjustments	Total Adjustments(1)	Tax After Adjustments
Mar. 1980(2)	$ 788	$ --	$ 788
June 1980	2,842	- 21	2,821
Sept. 1980	3,413	- 88	3,325
Dec. 1980	3,918	-927	2,991
Mar. 1981	6,953	+242	7,195
June 1981	7,253	-107	7,146
Sept. 1981	6,344	-251	6,093
Dec. 1981	6,007	-497	5,510
Mar. 1982	5,222	-221	5,001
June 1982	4,283	-295	3,988
Sept. 1982	4,404	-445	3,959
Dec. 1982	4,440	-634	3,806
Mar. 1983	3,320	-193	3,127
June 1983	2,951	-203	2,748
Sept. 1983	2,822	-300	2,522
Dec. 1983	2,736	-465	2,271
Mar. 1984	2,622	-228	2,394
June 1984	2,468	-218	2,250
Sept. 1984	2,447	-200	2,247
Dec. 1984	2,236	-256	1,980
Mar. 1985	1,850	-117	1,733
June 1985	1,653	-132	1,521
Sept. 1985	1,442	-146	1,296
Dec. 1985	1,254	+256	1,980
TOTAL	$83,668	-$5,911	$77,757

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(1) Adjustments were made because of errors by withholding agents during previous quarters or, more frequently, because of application of the net income limitation.
(2) One month only.

Source: U.S. Treasury Department, Internal Revenue Service, SOI Bulletin.

Section V
Table 16

U.S. MERCHANDISE TRADE VALUE
(Millions of Dollars)

Year	Exports (1)			Imports (2)			Trade Balance	
	Oil	Total	Oil as % of Total	Oil	Total	Oil as % of Total	Oil	Total
1974	792	98,092	0.8	26,073	102,559	25.4	-25,281	- 4,467
1975	907	107,652	0.8	26,664	98,503	27.1	-25,757	9,149
1976	998	115,223	0.9	34,614	123,477	28.0	-33,616	- 8,254
1977	1,276	121,232	1.1	44,071	150,390	29.3	-42,795	- 29,158
1978	1,561	143,681	1.1	42,188	174,757	24.1	-40,627	- 31,076
1979	1,914	181,860	1.1	59,805	209,458	28.6	-57,891	- 27,599
1980	2,833	220,626	1.3	78,637	244,871	32.1	-75,804	- 24,244
1981	3,696	233,677	1.6	76,659	260,982	29.4	-72,963	- 27,305
1982	5,947	212,193	2.8	60,458	243,952	24.8	-54,511	- 31,759
1983	4,557	200,486	2.3	53,217	258,048	20.6	-48,660	- 57,562
1984	4,470	217,865	2.1	56,924	325,726	17.5	-52,454	- 107,861
1985	4,707	213,133	2.2	50,475	345,276	14.6	-45,768	-132,143
1986	3,640	226,808	1.6	35,142	366,063	9.6	-31,502	-139,255
1987	2,837	252,866	1.1	42,285	405,901	10.4	-39,448	-153,035
1988	3,679	321,813	1.1	38,854	441,574	8.8	-35,175	-119,761

(1) Exports are on an f.a.s. (free alongside ship) basis.
(2) Imports are on an f.a.s. basis through 1980. Beginning in 1981, they are on a customs value basis.

Source: U.S. Department of Commerce, Bureau of Census, FT 135 and FT 410, December issues.

Section V
Table 17

OIL FINDING AND DEVELOPMENT COSTS
(Dollars per Barrel)

Year	U.S.	Foreign	Worldwide
1978	$ 6.64	$ 4.15	$ 5.42
1979	11.74	6.66	9.78
1980	10.57	6.17	8.46
1981	11.68	5.59	8.53
1982	9.86	8.66	9.44
1983	9.08	5.25	7.20
1984	6.80	3.94	5.60
1985	8.17	6.38	7.48
1986	7.11	7.41	7.23
1987	4.72	3.27	3.97
1988	5.09	4.73	4.90

Source: PETROLEUM OUTLOOK by John S. Herold, Inc., 5 Edgewood Avenue, Greenwich, Ct. 06830.

Section V
Table 18

DOMESTIC OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS AND EXPLORATION AND DEVELOPMENT ACTIVITIES FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 396	$ 541	$ 410	$ 344	$ 398	$ 337	$ 135	$ 169
Amoco Corp.	2,247	2,869	2,327	2,472	2,827	3,407	1,830	1,815
Anadarko Petroleum	175	246	242	175	162	144	116	103
Atlantic Richfield	2,044	2,328	2,856	2,286	2,654	2,771	1,062	676
British Petroleum	NA	NA	2,637	2,263	2,184	2,057	1,366	894
Burlington Northern	106	207	417	79	215	303	96	95
Chevron Corp.	2,857	4,431	3,367	2,467	2,688	1,806	962	911
Consolidated Nat. Gas	123	163	178	218	272	332	166	222
DuPont (Conoco)	636	444	812	673	805	849	446	437
Enron	185	256	345	240	362	187	88	87
Enserch	90	151	141	148	236	254	142	148
Exxon	2,294	4,147	4,043	3,463	4,116	4,396	1,947	1,691
Kerr-McGee	198	270	325	214	186	257	86	75
Louisiana Land	447	681	479	275	276	236	105	87
Maxus Energy Corp.	350	524	601	156	188	255	107	113
Mesa	509	628	497	277	661	113	24	54
Mobil	2,572	2,431	3,265	2,267	1,343	1,413	1,054	789
Murphy	115	230	222	207	158	114	61	70
Occidental	810	982	219	379	505	416	274	198
Pennzoil	403	401	393	240	287	482	139	142
Phillips	821	1,619	1,062	1,768	942	607	309	299
Royal Dutch/Shell	2,074	2,647	2,405	2,067	3,034	3,206	2,014	1,685
Santa Fe So. Pacific	163	322	312	229	240	232	170	304
Sun	3,069	958	1,034	808	1,394	871	512	593
Tenneco	970	1,886	1,224	922	833	694	247	277
Texaco	2,520	3,186	3,247	2,773	2,037	1,797	1,140	1,056
USX	710	948	900	1,032	1,403	1,066	440	507
Union Pacific	482	615	518	357	381	384	211	216
Union Texas Petroleum	170	201	155	171	294	139	98	115
Unocal	828	1,003	873	606	835	810	483	436
TOTAL	$28,634	$35,315	$35,506	$29,576	$31,916	$29,935	$15,830	$14,264

Source: Salomon Brothers Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-1987, 1988 Edition.

DOMESTIC OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 140	$ 148	$ 78	$ 109	$ 100	$ 37	$ 5	$ 53
Amoco Corp.	249	298	203	781	718	928	339	356
Anadarko Petroleum	42	64	69	42	40	47	51	40
Atlantic Richfield	487	318	201	336	428	525	18	49
British Petroleum	NA	NA	833	492	496	224	31	0
Burlington Northern	31	41	67	14	67	86	25	26
Chevron Corp.	499	1,281	385	442	281	61	22	42
Consolidated	42	39	16	49	48	148	20	60
DuPont (Conoco)	119	118	135	194	222	140	47	121
Enron	45	65	66	48	196	61	37	24
Enserch	10	19	17	31	77	55	17	22
Exxon	478	1,258	539	808	1,311	445	106	690
Kerr-McGee	53	58	45	87	34	136	11	30
Louisiana Land	61	128	61	39	44	41	28	11
Maxus Energy Corp.	131	126	211	0	35	40	8	15
Mesa	224	156	89	66	533	24	11	32
Mobil	1,324	598	1,087	690	0	93	62	65
Murphy	22	104	69	89	37	13	21	22
Occidental	249	171	44	68	45	42	44	24
Pennzoil	129	95	96	85	117	308	38	37
Phillips	203	800	148	1,056	341	25	13	28
Royal Dutch/Shell	422	627	422	367	1,256	1,277	496	323
Santa Fe So. Pacific	13	61	62	82	41	47	59	188
Sun	2,482	178	129	216	592	153	81	159
Tenneco	370	965	225	365	218	210	45	61
Texaco	902	543	692	865	399	125	59	104
USX	169	243	121	316	618	161	37	133
Union Pacific	95	145	92	99	54	54	7	55
Union Texas Petroleum	30	18	14	37	140	39	20	29
Unocal	258	192	174	127	274	121	24	38
TOTAL	$ 9,279	$ 8,857	$ 6,390	$ 8,000	$ 8,762	$ 5,666	$ 1,782	$2,837

Source: Salomon Brothers Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 20

DOMESTIC OUTLAYS FOR PETROLEUM EXPLORATION FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 171	$ 268	$ 148	$ 110	$ 163	$ 197	$ 90	$ 75
Amoco Corp.	1,083	1,334	1,191	1,047	1,299	1,359	710	643
Anadarko Petroleum	64	92	81	62	59	41	27	29
Atlantic Richfield	622	853	886	849	996	785	341	232
British Petroleum	NA	NA	460	500	592	689	315	399
Burlington Northern	37	50	132	42	97	71	30	23
Chevron Corp.	1,217	1,496	1,371	1,007	997	685	351	294
Consolidated Nat. Gas	45	73	103	85	73	64	65	89
DuPont (Conoco)	135	138	288	251	269	284	177	145
Enron	53	82	140	106	62	35	17	19
Enserch	28	41	44	50	66	77	51	40
Exxon	760	954	932	780	1,032	1,108	491	333
Kerr-McGee	89	105	192	67	93	95	50	30
Louisiana Land	202	271	176	124	125	111	42	42
Maxus Energy Corp.	89	173	170	69	80	92	45	37
Mesa	120	177	134	102	67	45	7	5
Mobil	627	996	1,207	798	523	504	282	167
Murphy	67	91	109	95	81	66	28	35
Occidental	333	552	106	184	184	150	86	55
Pennzoil	69	115	95	59	66	58	19	29
Phillips	312	404	397	344	317	234	130	128
Royal Dutch/Shell	499	611	637	631	614	716	458	438
Santa Fe So. Pacific	65	120	72	47	63	58	29	35
Sun	159	203	327	173	255	236	166	156
Tenneco	159	312	309	177	185	116	67	60
Texaco	610	1,062	1,240	871	851	603	339	264
USX	204	304	347	297	291	263	93	122
Union Pacific	148	147	157	129	166	130	78	74
Union Texas Petroleum	61	84	76	70	104	56	44	37
Unocal	206	281	268	198	223	231	127	130
TOTAL	$8,234	$11,389	$11,795	$9,324	$9,993	$9,159	$4,755	$4,165

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 21

DOMESTIC OUTLAYS FOR PETROLEUM DEVELOPMENT FOR 30 LARGE ENERGY COMPANIES
(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 85	$ 125	$ 184	$ 125	$ 135	$ 103	$ 40	$ 41
Amoco Corp.	915	1,237	933	644	810	1,120	781	816
Anadarko Petroleum	69	90	92	71	63	56	38	34
Atlantic Richfield	935	1,157	1,769	1,101	1,230	1,461	703	395
British Petroleum	NA	NA	1,344	1,271	1,096	1,144	1,020	495
Burlington Northern	38	116	218	23	51	146	41	46
Chevron Corp.	1,141	1,654	1,611	1,018	1,410	1,060	589	575
Consolidated Nat. Gas	36	51	59	84	151	120	81	73
DuPont (Conoco)	382	188	389	228	314	425	222	171
Enron	87	109	139	86	104	91	34	44
Enserch	52	91	80	67	93	122	74	86
Exxon	1,056	1,935	2,572	1,875	1,773	2,843	1,350	668
Kerr-McGee	56	107	88	60	59	26	25	15
Louisiana Land	184	282	242	112	107	84	35	34
Maxus Energy Corp.	130	225	220	87	73	123	54	61
Mesa	165	295	274	109	61	44	6	17
Mobil	621	837	971	779	820	816	710	557
Murphy	26	35	44	23	40	35	12	13
Occidental	228	259	69	127	276	224	144	119
Pennzoil	205	191	202	96	104	116	82	76
Phillips	306	415	517	368	284	348	166	143
Royal Dutch/Shell	1,153	1,409	1,346	1,069	1,164	1,213	1,060	924
Santa Fe So. Pacific	85	141	178	100	136	127	82	81
Sun	428	577	578	419	547	482	265	278
Tenneco	441	609	690	380	430	368	135	156
Texaco	1,008	1,581	1,315	1,037	787	1,069	742	688
USX	337	401	432	419	494	642	310	252
Union Pacific	239	323	269	129	161	200	126	87
Union Texas Petroleum	79	99	65	64	50	44	34	49
Unocal	364	530	431	281	338	458	332	268
TOTAL	$10,851	$15,069	$17,321	$12,252	$13,161	$15,110	$9,293	$7,262

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 22

WORLDWIDE OUTLAYS FOR PETROLEUM PROPERTY ACQUISITIONS AND EXPLORATION AND DEVELOPMENT ACTIVITIES FOR 30 LARGE ENERGY COMPANIES

(In Millions of Dollars)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 769	$ 991	$ 812	$ 645	$ 675	$ 705	$ 266	$ 358
Amoco Corp.	3,471	4,031	3,546	3,482	4,056	4,865	2,723	2,638
Anadarko Petroleum	183	251	244	177	168	154	120	109
Atlantic Richfield	2,256	2,525	3,243	2,812	3,119	3,154	1,475	929
British Petroleum	NA	NA	4,395	3,496	3,351	3,498	2,865	2,417
Burlington Northern	106	207	417	79	215	303	96	95
Chevron Corp.	4,105	5,938	4,955	3,882	3,783	2,642	1,624	1,608
Consolidated Nat. Gas	123	163	178	218	272	332	166	222
DuPont (Conoco)	1,321	629	1,341	1,175	1,303	1,325	954	1,113
Enron	248	354	435	276	464	247	102	101
Enserch	96	154	164	167	246	269	147	151
Exxon	4,595	6,824	6,940	5,648	6,536	6,924	3,792	4,614
Kerr-McGee	342	459	466	312	279	360	149	154
Louisiana Land	511	803	602	369	354	321	140	137
Maxus Energy Co.	513	818	1,070	278	436	439	271	194
Mesa	516	636	509	277	661	113	24	54
Mobil	3,793	3,777	4,835	3,550	2,232	2,261	1,800	1,497
Murphy	272	303	325	318	275	230	104	125
Occidental	1,350	1,735	691	737	800	888	583	384
Pennzoil	420	424	419	262	330	523	159	168
Phillips	1,325	2,251	1,684	2,309	1,258	893	485	497
Royal Dutch/Shell	4,895	5,755	5,447	4,485	5,362	6,324	4,242	3,712
Santa Fe So. Pacific	163	322	312	229	240	232	170	304
Sun	3,231	1,063	1,166	925	1,648	1,285	771	680
Tenneco	1,025	2,208	1,367	1,027	925	884	363	394
Texaco	3,640	4,089	4,194	3,570	2,836	2,391	1,703	1,544
USX	1,039	1,541	1,372	1,500	1,822	1,588	791	805
Union Pacific	482	615	518	357	381	384	211	218
Union Texas Petroleum	381	417	398	366	466	368	206	170
Unocal	1,217	1,358	1,411	1,163	1,309	1,245	708	708
TOTAL	$42,338	$50,651	$53,456	$44,091	$45,822	$45,147	$27,210	$26,098

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

DOMESTIC OIL AND GAS FINDING COSTS EXCLUDING PROPERTY ACQUISITION COSTS(1) FOR 30 LARGE ENERGY COMPANIES

(Dollars Per Barrel of Oil Equivalent)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$ 7.35	$5.76	$19.53	$28.78	$11.25	$13.85	$6.05	$3.80
Amoco Corp.	7.17	6.77	7.62	4.52	6.30	9.11	NM	3.77
Anadarko Petroleum	8.67	23.74	6.29	7.06	5.59	3.40	1.67	4.73
Atlantic Richfield	5.44	8.60	5.46	7.28	4.21	NM	3.15	1.38
British Petroleum	NA	NA	NA	9.37	3.62	49.76	NM	1.88
Burlington Northern	4.05	8.16	21.88	0.19	6.94	8.19	32.77	5.38
Chevron Corp.	8.69	13.56	14.03	7.49	4.56	8.07	13.09	5.16
Consolidated Nat. Gas	5.59	7.15	14.29	2.82	7.68	4.72	4.66	4.93
DuPont (Conoco)	4.97	7.41	6.02	6.22	7.05	9.62	39.90	3.50
Enron	9.77	36.97	18.20	12.39	6.51	2.92	1.74	6.30
Enserch	2.77	4.63	7.22	5.48	2.42	3.47	3.23	4.64
Exxon	6.46	5.96	9.24	4.82	6.15	9.99	6.16	NM
Kerr-McGee	5.37	21.93	21.54	14.11	91.20	23.42	NM	6.28
Louisiana Land	18.53	13.71	10.90	6.10	11.23	7.36	4.44	11.69
Maxus Energy Corp.	7.38	10.47	29.62	17.02	7.46	10.93	3.76	6.32
Mesa	7.18	12.10	3.81	10.55	5.82	1.51	NM	1.01
Mobil	6.06	5.95	9.56	7.30	6.79	9.55	4.34	3.45
Murphy	9.15	12.60	16.39	6.00	10.68	13.47	18.46	4.17
Occidental	22.59	19.86	75.00	13.23	5.49	6.43	2.41	2.59
Pennzoil	6.55	7.65	3.96	7.38	9.36	6.69	27.55	7.59
Phillips	7.99	7.38	7.11	7.75	4.47	14.92	14.32	3.27
Royal Dutch/Shell	4.41	8.79	6.58	6.05	6.15	6.40	6.84	4.29
Santa Fe So. Pacific	6.67	14.37	12.30	7.23	9.87	8.47	6.59	6.00
Sun	7.28	9.47	11.01	11.31	8.25	6.39	13.40	9.50
Tenneco	6.03	8.49	9.87	5.79	5.36	3.19	7.44	4.50
Texaco	NM	17.68	20.91	18.03	68.73	12.23	9.41	4.18
USX	7.71	10.96	11.05	9.40	7.52	5.20	4.62	6.23
Union Pacific	4.61	5.34	8.81	6.62	7.55	7.25	NM	NM
Union Texas Petroleum	16.15	12.34	35.25	12.56	10.87	5.13	8.67	5.49
Unocal	6.49	10.86	9.73	5.04	6.79	7.57	8.01	4.89
TOTAL	$ 7.31	$ 8.85	$11.06	$6.31	$5.96	$15.63	$14.06	$6.12

NM = Not meaningful

$$\text{Finding Costs} = \frac{\text{Outlays for Petroleum Exploration and Development}}{\text{Reserves Additions from Extensions \& Discoveries, Improved Recovery and Revisions}}$$

(1) This table has been changed to reflect oil and gas finding costs excluding property acquisition costs, which gives a more accurate assessment of true finding costs.

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

Section V
Table 24

WORLDWIDE OIL AND GAS FINDING COSTS EXCLUDING PROPERTY ACQUISITION COSTS(1)
FOR 30 LARGE ENERGY COMPANIES
(Dollars Per Barrel of Oil Equivalent)

Company	1980	1981	1982	1983	1984	1985	1986	1987
Amerada Hess	$13.48	$ 8.50	$34.86	$16.85	$18.39	$10.48	$3.15	$2.75
Amoco Corp.	5.65	5.20	7.80	5.72	7.23	8.96	34.13	3.97
Anadarko Petroleum	8.69	22.32	6.18	7.04	5.11	3.43	1.71	4.29
Atlantic Richfield	5.36	8.61	4.99	6.64	4.78	NM	3.76	1.79
British Petroleum	NA	NA	NM	6.26	2.66	6.22	NM	2.60
Burlington Northern	4.05	8.16	21.88	0.19	6.94	8.19	32.77	5.38
Chevron Corp.	7.83	10.70	8.96	5.64	5.58	5.76	12.06	4.92
Consolidated Nat. Gas	5.59	7.15	14.29	2.82	7.68	4.72	4.66	4.93
DuPont (Conoco)	13.44	8.69	8.66	5.60	5.03	6.81	NM	3.79
Enron	7.25	14.92	13.19	7.09	8.35	NM	2.07	6.17
Enserch	2.88	4.58	7.93	6.04	2.57	3.67	3.45	4.82
Exxon	2.97	10.22	5.79	3.97	5.53	6.24	6.32	NM
Kerr-McGee	6.00	38.10	30.80	7.67	NM	16.69	NM	16.17
Louisiana Land	14.97	16.37	12.34	7.53	7.42	12.78	6.05	7.00
Maxus Energy Corp.	6.97	10.18	21.22	7.69	5.71	11.08	4.82	4.81
Mesa	7.36	11.95	3.91	10.13	5.30	1.53	NM	1.01
Mobil	4.10	2.70	18.98	4.87	6.24	10.49	3.31	3.76
Murphy	NM	8.89	7.93	7.93	9.82	11.94	NM	3.61
Occidental	17.77	18.94	12.50	7.19	2.67	3.90	2.22	2.07
Pennzoil	6.52	7.81	4.22	7.98	11.14	7.20	22.65	8.43
Phillips	NM	14.07	8.83	6.14	5.49	27.49	2.20	2.44
Royal Dutch/Shell	8.19	7.87	11.24	4.30	3.39	8.63	4.92	2.38
Santa Fe So. Pacific	6.67	14.37	12.30	7.23	9.87	8.47	6.59	6.00
Sun	11.20	9.83	10.94	6.80	7.29	7.24	15.94	9.00
Tenneco	6.58	8.03	10.22	6.18	5.88	3.64	6.84	5.43
Texaco	NM	8.28	22.79	12.35	21.38	8.63	6.56	[illegible]
USX	4.81	14.89	16.12	5.44	9.60	6.70	7.86	5.00
Union Pacific	4.61	5.34	8.81	6.62	7.55	7.95	NM	NM
Union Texas Petroleum	8.09	12.70	NM	6.35	9.27	9.23	4.81	4.01
Unocal	9.44	7.73	34.79	7.85	7.79	6.03	5.22	3.62
TOTAL	$6.70	$ 7.59	$10.85	$5.35	$5.29	$9.49	$8.92	$4.21

NA = Not Available
NM = Not Meaningful

$$\text{Finding Costs} = \frac{\text{Outlays for Petroleum Exploration and Development}}{\text{Reserves Additions from Extensions \& Discoveries, Improved Recovery and Revisions}}$$

(1) This table has been changed to reflect oil and gas finding costs excluding property acquisition costs, which gives a more accurate assessment of true finding costs.

Source: Salomon Brothers, Inc., Proved Petroleum Reserves of 30 Large Energy Companies, 1980-87, 1988 Edition.

BASIC PETROLEUM DATA BOOK

SECTION VI. PRICES

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Section VI
Table 1

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES CRUDE OIL
CURRENT AND CONSTANT 1967 DOLLARS
(U.S. dollars per U.S. barrel of 42 gallons)

Year	Price in Current Dollars	Producer Price Index All Commodities(1) (1967 = 100)	Price in 1967 Constant Dollars
1947	$1.93	76.5	$2.52
1948	2.60	82.8	3.14
1949	2.54	78.7	3.23
1950	2.51	81.8	3.07
1951	2.53	91.1	2.78
1952	2.53	88.6	2.86
1953	2.68	87.4	3.07
1954	2.78	87.6	3.17
1955	2.77	87.8	3.15
1956	2.79	90.7	3.08
1957	3.09	93.3	3.31
1958	3.01	94.6	3.18
1959	2.90	94.8	3.06
1960	2.88	94.9	3.03
1961	2.89	94.5	3.06
1962	2.90	94.8	3.06
1963	2.89	94.5	3.06
1964	2.88	94.7	3.04
1965	2.86	96.6	2.96
1966	2.88	99.8	2.89
1967	2.92	100.0	2.92
1968	2.94	102.5	2.87
1969	3.09	106.5	2.90
1970	3.18	110.4	2.88
1971	3.39	113.9	2.98
1972	3.39	119.1	2.85
1973	3.89	134.7	2.89
1974	6.74	160.1	4.21
1975	7.56	174.9	4.32
1976	8.14	182.9	4.45
1977	8.57	194.2	4.41
1978	8.96	209.3	4.28
1979	12.51	235.6	5.31
1980	21.59	268.7	8.03
1981	31.77	293.4	10.83

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(1) For 1976 and prior years figures are for Wholesale Price Index.

Source: Current Dollar Price, U.S. Energy Information Administration
Producer Price Index, U.S. Bureau of Labor Statistics
Constant Dollar Price computed by American Petroleum Institute

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES CRUDE OIL
CURRENT AND CONSTANT 1982 DOLLARS
(U.S. dollars per U.S. barrel of 42 gallons)

Year	Price in Current Dollars	Producer Price Index All Commodities(1) (1982 = 100)	Price in 1982 Constant Dollars
1982	$28.52	100.0	$28.52
1983	26.19	101.3	25.85
1984	25.88	103.7	24.96
1985	24.09	103.2	23.34
1986	12.51	100.2	12.49
1987	15.41	102.8	14.99
1988	12.57	108.5	11.59

Source: Current Dollars Price--U.S. Energy Information Administration
Producer Price Index--U.S. Bureau of Labor Statistics
Constant Dollar Price computed by American Petroleum Institute

Section VI
Table 2

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES NATURAL GAS
CURRENT AND CONSTANT 1967 CENTS
(U.S. cents per thousand cubic feet)

Year	Price in Current Cents	Producer Price Index(2) All Commodities (1967 = 100)	Price in 1967 Constant Cents
1947	6.0	76.5	7.8
1948	6.5	82.8	7.9
1949	6.3	78.7	8.0
1950	6.5	81.8	7.9
1951	7.3	91.1	8.0
1952	7.8	88.6	8.8
1953	9.2	87.4	10.5
1954	10.1	87.6	11.5
1955	10.4	87.8	11.8
1956	10.8	90.7	11.9
1957	11.3	93.3	12.1
1958	11.9	94.6	12.6
1959	12.9	94.8	13.6
1960	14.0	94.9	14.8
1961	15.1	94.5	16.0
1962	15.5	94.8	16.4
1963	15.8	94.5	16.7
1964	15.4(1)	94.7	16.3
1965	15.6	96.6	16.1
1966	15.7	99.8	15.7
1967	16.0	100.0	16.0
1968	16.4	102.5	16.0
1969	16.7	106.5	15.7
1970	17.1	110.4	15.5
1971	18.2	113.9	16.0
1972	18.6	119.1	15.6
1973	21.6	134.7	16.0
1974	30.4	160.1	19.0
1975	44.5	174.9	25.4
1976	58.0	182.9	31.7
1977	79.0	194.2	40.7
1978	90.5	209.3	43.2
1979	117.8	235.6	50.0
1980	159.0	268.7	59.2
1981	198.0	293.4	67.5

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(1) For 1964 and prior years, volumes were reported on the basis of 14.65 p.s.i.
For 1965 and subsequent years, volumes were reported on the basis of 14.73 p.s.i.
(2) For 1976 and prior years, figures are for Wholesale Price Index.

Source: Current Price, U.S. Energy Information Administration.
Producer Price Index, U.S. Bureau of Labor Statistics
Constant Price computed by the American Petroleum Institute

AVERAGE ANNUAL WELLHEAD PRICE OF UNITED STATES NATURAL GAS
CURRENT AND CONSTANT 1982 DOLLARS
(U.S. cents per thousand cubic feet)

Year	Price in Current Cents	Producer Price Index All Commodities (1982 = 100)	Price in 1982 Constant Cents
1982	246.0	100.0	246.0
1983	259.0	101.3	255.7
1984	266.0	103.7	256.5
1985	251.0	103.2	243.2
1986	194.0	100.2	193.6
1987	167.0	102.8	162.5
1988	171.0	108.5	157.6

Source: Current Price--U.S. Energy Information Administration
Producer Price Index--U.S. Bureau of Labor Statistics
Constant Price computed by the American Petroleum Institute

REFINER ACQUISITION COST OF CRUDE OIL
(Dollars per Barrel)

Year	Domestic	Imported	Composite
1968(1)	3.21	2.90	3.17
1969	3.37	2.80	3.29
1970	3.46	2.96	3.40
1971	3.68	3.17	3.60
1972	3.67	3.22	3.58
1973	4.17	4.08	4.15
1974	7.18	12.52	9.07
1975	8.39	13.93	10.38
1976	8.84	13.48	10.89
1977	9.55	14.53	11.96
1978	10.61	14.57	12.46
1979	14.27	21.67	17.72
1980	24.23	33.89	28.07
1981	34.33	37.05	35.24
1982	31.22	33.55	31.87
1983	28.87	29.30	28.99
1984	28.53	28.88	28.63
1985	26.65	27.03	26.76
Jan.	26.89	26.51	27.02
Feb.	26.39	27.05	26.53
Mar.	26.61	27.23	26.77
Apr.	26.79	27.61	27.04
May	26.90	27.62	27.11
Jun.	26.50	27.27	26.69
Jul.	26.67	26.46	26.61
Aug.	26.45	26.62	26.50
Sep.	26.39	26.59	26.44
Oct.	26.59	26.80	26.65
Nov.	26.72	27.12	26.85
Dec.	26.91	26.60	26.82

(1) Not available prior to 1968.

Source: U.S. Department of Energy--Annual Energy Review and Monthly Energy Review.

REFINER ACQUISITION COST OF CRUDE OIL
(Dollars per Barrel)

Year	Domestic	Imported	Composite
1986	14.83	13.98	14.55
Jan.	25.94	24.92	25.64
Feb.	20.42	18.02	19.81
Mar.	15.11	14.21	14.87
Apr.	13.06	13.14	13.08
May	12.99	13.17	13.05
Jun	13.11	12.25	12.82
Jul.	11.82	10.91	11.51
Aug.	11.95	11.87	11.92
Sep.	13.27	12.85	13.11
Oct.	13.20	12.78	13.05
Nov.	13.21	13.46	13.30
Dec.	13.67	14.16	13.85
1987	17.77	18.16	17.91
Jan.	16.02	16.43	16.17
Feb.	16.76	16.96	16.82
Mar.	16.93	17.24	17.03
Apr.	17.21	17.88	17.43
May	17.64	18.24	17.84
Jun	18.34	18.71	18.47
Jul	19.05	19.25	19.14
Aug.	19.41	19.30	19.36
Sep.	18.58	18.55	18.57
Oct.	18.37	18.57	18.45
Nov.	17.95	18.16	18.03
Dec.	17.03	17.45	17.19
1988	14.73	14.71	14.73
Jan.	15.82	16.10	15.92
Feb.	15.61	15.61	15.72
Mar.	14.92	14.82	14.88
Apr.	15.88	15.69	15.81
May	16.35	16.02	16.22
Jun	15.83	15.52	15.71
Jul	14.65	14.80	14.71
Aug.	14.36	14.37	14.36
Sep.	13.97	13.90	13.94
Oct.	12.90	13.03	12.96
Nov.	12.61	12.54	12.58
Dec.	13.88	14.08	13.97

Source: U.S. Department of Energy--Annual Energy Review and Monthly Energy Review.

REFINER ACQUISITION COST OF CRUDE OIL
(Dollars per Barrel)

Year	Domestic	Imported	Composite
1989			
Jan.	15.49	15.98	15.70
Feb.	16.11	16.59	16.31
Mar.	17.39	17.77	17.55
Apr.(p)	18.92	19.59	19.22

(p) Preliminary.

Source: U.S. Department of Energy--Annual Energy Review and Monthly Energy Review.

TREND OF WHOLESALE PRICES OF COMMODITIES UTILIZED IN THE PRODUCTION OF PETROLEUM
(1967 = 100)

Year	Oil Field Machinery and Tools	Line Pipe Carbon	Oil Well Casing Carbon	Oil Well Casing Alloy
1947	54.9	N.A.	N.A.	N.A.
1948	59.5	N.A.	N.A.	N.A.
1949	62.9	N.A.	N.A.	N.A.
1950	64.3	N.A.	N.A.	N.A.
1951	70.8	N.A.	N.A.	N.A.
1952	70.9	N.A.	N.A.	N.A.
1953	73.9	N.A.	N.A.	N.A.
1954	76.5	76.0	69.2	66.0
1955	79.7	80.6	72.8	70.4
1956	84.7	91.9	77.7	77.7
1957	90.5	102.2	86.2	87.9
1958	91.0	105.5	89.8	91.6
1959	91.1	105.1	91.6	93.4
1960	91.2	104.1	91.6	93.4
1961	92.5	102.9	89.5	91.3
1962	93.8	103.5	88.0	89.7
1963	93.3	105.9	88.8	90.6
1964	94.8	103.6	91.9	93.4
1965	95.2	97.9	96.2	97.9
1966	96.5	97.9	96.2	97.9
1967	100.0	100.0	100.0	100.0
1968	106.4	104.0	101.5	102.5
1969	112.7	109.2	104.5	106.4
1970	118.7	113.2	109.1	111.2
1971	122.6	124.7	120.7	122.7
1972	127.3	133.7	128.4	131.1
1973	133.2	139.1	133.2	136.3
1974	157.8	189.8	170.7	181.3

N.A. Not available

Source: U.S. Bureau of Labor Statistics, Wholesale Price Index

TREND OF WHOLESALE PRICES OF COMMODITIES UTILIZED IN THE PRODUCTION OF PETROLEUM
(1967 = 100)

Year	Oil Field Machinery and Tools	Line Pipe Carbon	Oil Well Casing Carbon	Oil Well Casing Alloy
1975	196.3	226.9	211.5	220.1
1976	217.7	234.6	223.1	239.2
1977	236.6	260.5	244.3	270.0
1978	261.6	296.6	271.6	299.8
1979	289.6	303.4	285.2	316.9
1980	335.5	336.2	326.9	366.9
1981	401.0	394.0	407.6	501.7
1982	439.6	416.8	451.9	584.0
1983	427.9	406.3	406.1	455.7
1984	425.0	405.6	386.4	416.8
1985	426.3	405.1	381.4	386.6
1986	415.5	402.7	355.2	386.0
1987	410.0	405.5	370.0	359.7(p)

(p) Based on partial data.

Source: U.S. Bureau of Labor Statistics, Producer Price Index

TREND OF REGULAR GRADE GASOLINE PRICES VS. PRICES OF OTHER CONSUMER GOODS AND SERVICES

	RETAIL PRICE OF REGULAR GRADE GASOLINE			PRICE INDEXES OF SOME OTHER CONSUMER ITEMS				
Year	Service Station Price Excl. Taxes	State and Federal Taxes	Service Station Price Incl. Taxes	All Items	Food	Rent	Apparel and Upkeep	Reading and Recreation
		Cents per Gallon				Index: 1967 = 100		
1947	16.93	6.18	23.11	66.9	70.6	61.1	78.2	68.7
1948	19.54	6.34	25.88	72.1	76.6	65.1	83.3	72.2
1949	20.27	6.52	26.79	71.4	73.5	68.0	80.1	74.9
1950	20.08	6.68	26.76	72.1	74.5	70.4	79.0	74.4
1951	20.31	6.84	27.15	77.8	82.8	73.2	86.1	76.6
1952	20.04	7.32	27.36	79.5	84.3	76.2	85.3	76.9
1953	21.28	7.41	28.69	80.1	83.0	80.3	84.6	77.7
1954	21.56	7.48	29.04	80.5	82.8	83.2	84.5	76.9
1955	21.42	7.65	29.07	80.2	81.6	84.3	84.1	76.7
1956	21.57	8.36	29.93	81.4	82.2	85.9	85.8	77.8
1957	22.11	8.85	30.96	84.3	84.9	87.5	87.3	80.7
1958	21.47	8.91	30.38	86.6	88.5	89.1	87.5	83.9
1959	21.18	9.31	30.49	87.3	87.1	90.4	88.2	85.3
1960	20.99	10.14	31.13	88.7	88.0	91.7	89.6	87.3
1961	20.53	10.23	30.76	89.6	89.1	92.9	90.4	89.3
1962	20.36	10.28	30.64	90.6	89.9	94.0	90.9	91.3
1963	20.11	10.31	30.42	91.7	91.2	95.0	91.9	92.8
1964	19.98	10.37	30.35	92.9	92.4	95.9	92.7	95.0
1965	20.70	10.45	31.15	94.5	94.4	96.9	93.7	95.9
1966	21.57	10.51	32.08	97.2	99.1	98.2	96.1	97.5
1967	22.55	10.61	33.16	100.0	100.0	100.0	100.0	100.0
1968	22.93	10.78	33.71	104.2	103.6	102.4	105.4	104.7
1969	23.85	10.99	34.84	109.8	108.9	105.7	111.5	108.7
1970	24.55	11.14	35.69	116.3	114.9	110.1	116.1	113.4
1971	25.20	11.23	36.43	121.3	118.4	115.2	119.8	119.3
1972	24.46	11.67	36.13	125.3	123.5	119.2	122.3	122.8
1973	26.88	11.94	38.82	133.1	141.4	124.3	126.8	125.9
1974	40.41	12.00	52.41	147.7	161.7	130.6	136.2	133.8

Sources: Retail Price of Regular Grade Gasoline, Platt's Oil Price Handbook and Oilmanac.
Price Indexes, U.S. Department of Labor, Bureau of Labor Statistics

Section VI
Table 5a

TREND OF REGULAR GRADE GASOLINE PRICES VS. PRICES OF OTHER CONSUMER GOODS AND SERVICES

	RETAIL PRICE OF REGULAR LEADED GASOLINE			PRICE INDEXES OF SOME OTHER CONSUMER ITEMS				
Year	Service Statio Price Excl. Taxes	State and Federal Taxes	Service Station Price Incl. Taxes	All Items	Food	Rent	Apparel and Upkeep	Enter- tainment(2)
		Cents per Gallon				Index: 1967 = 100		
1975	45.44	11.77	57.22	161.2	175.4	137.3	142.3	144.4
1976	47.44	12.03	59.47	170.5	180.8	144.7	147.6	151.2
1977	50.70	12.37	63.07	181.5	192.2	153.3	154.2	157.9
1978	53.09	12.62	65.71	195.4(1)	211.4	164.0	159.6	176.6
1979	74.33	13.46	87.79	217.4	234.5	176.0	166.6	188.5
1980	104.73	14.37	119.10	246.8	254.6	191.6	178.4	205.3
1981	N.A.	N.A.	131.10	272.3	274.6	208.2	186.9	221.4
						Index: 1982 = 100		
1982	N.A.	N.A.	122.20	100.0	100.0	100.0	100.0	100.0
1983	95.36	20.34	115.70	103.2	102.1	105.8	102.5	104.3
1984	91.46	20.84	112.90	107.6	106.0	111.3	104.4	108.2
1985	89.64	21.86	111.50	111.4	108.4	118.1	107.4	112.4
1986	63.63	22.C7	85.70	113.6	111.9	125.0	108.3	116.2
1987	66.33	23.37	89.70	117.8	116.5	125.6	113.3	NA
1988	65.85	24.10	89.95	118.3	118.2	127.8	115.4	120.3

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(1) Beginning in July, 1978, the CPI was given in two forms, CPI-U & CPI-W. The index used above is the CPI-U.

(2) Represented "Reading and Recreation" prior to July 1978.

N.A. Not available

Source: Retail price of regular grade gasoline at full-service stations, Platt's Oil Price Handbook and Oilmanac
1979-80 retail price of regular grade gasoline at full-service stations, Platt's/Lundberg Summary from Platt's Oil Price Handbook
1981-1988 -- retail price of regular grade gasoline, Bureau of Labor Statistics
Price indexes, U.S. Department of Labor, Bureau of Labor Statistics

U.S. ANNUAL AVERAGE RETAIL PRICE OF #2 HOME HEATING OIL

Year	Cost per Gallon(1) (current cents)	Consumer Price Index (1967 = 100)	Cost Per Gallon (1967 constant cents)
1956(2)	15.21	81.4	18.69
1957	15.98	84.3	18.96
1958	15.07	86.6	17.40
1959	15.29	87.3	17.51
1960	15.02	88.7	16.93
1961	15.62	89.6	17.43
1962	15.62	90.6	17.24
1963	15.97	91.7	17.42
1964	16.06	92.9	17.29
1965	16.04	94.5	16.97
1966	16.43	97.2	16.90
1967	16.91	100.0	16.91
1968	17.44	104.2	16.74
1969	17.82	109.8	16.23
1970	18.48	116.3	15.89
1971	19.63	121.3	16.18
1972	19.72	125.3	15.74
1973	22.75	133.1	17.09
1974	36.01	147.7	24.38
1975	38.98	161.2	24.18
1976	41.80	170.5	24.52
1977	47.37	181.5	26.10
1978	50.80(e)	195.4	26.00
1979	72.80	217.4	33.49
1980	100.97	246.8	40.91
1981	124.66	272.4	45.76
		(1982 = 100)	(1982 constant cents)
1982	120.86	100.0	120.86
1983	110.12	103.2	106.71
1984	111.97	107.6	104.06
1985	107.55	111.4	96.41
1986	83.45	113.6	73.46
1987	85.15	117.7	72.35
1988	84.63	118.3	71.54

(e) Estimate.
(1) Includes all applicable taxes.
(2) Data prior to 1956 is not available on a comparable basis.

Source: U.S. Department of Labor, Bureau of Labor Statistics
BLS Monthly prices averaged by API to derive annual average price

Section VI
Table 7

TOTAL DOLLAR VALUE OF U.S. CRUDE OIL AND NATURAL GAS AT THE WELLHEAD

	VALUE (Thousand dollars)		PRODUCTION (Trillion BTU)		PRICE AT WELLHEAD (Cents per million BTU)		PRICE AT WELLHEAD (1967 constant cents per million BTU)	
Year	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas
1947	$3,577,890	$274,709	10,771	5,012	33.2	5.5	43.4	7.2
1948	5,245,080	333,173	11,717	5,615	44.8	5.9	54.1	7.1
1949	4,674,770	344,034	10,683	5,911	43.8	5.8	55.7	7.4
1950	4,963,380	408,521	11,449	6,841	43.4	6.0	53.1	7.3
1951	5,690,410	542,964	13,037	8,106	43.6	6.7	47.9	7.4
1952	5,785,230	623,649	13,282	8,705	43.6	7.2	49.2	8.1
1953	6,327,100	774,966	13,671	9,116	46.3	8.5	53.0	9.7
1954	6,424,930	882,501	13,427	9,488	47.9	9.3	54.7	10.6
1955	6,870,380	978,357	14,445	10,532	47.6	9.3	54.2	10.6
1956	7,296,760	1,083,812	15,344	11,252	47.6	9.6	52.5	10.6
1957	8,079,259	1,201,759	15,346	11,885	52.6	10.1	56.4	10.8
1958	7,379,973	1,317,521	14,154	12,244	52.1	10.8	55.1	11.4
1959	7,473,336	1,556,800	14,662	13,361	51.0	11.7	53.8	12.3
1960	7,420,181	1,789,970	14,664	14,135	50.6	12.7	53.3	13.4
1961	7,565,582	1,996,241	15,185	14,691	49.8	13.6	52.7	14.4
1962	7,774,051	2,145,301	15,495	15,365	50.2	14.0	53.0	14.8
1963	7,965,743	2,328,030	15,741	16,271	50.6	14.3	53.5	15.1
1964	8,017,078	2,387,689	15,691	17,138	51.1	13.9	54.0	14.7
1965	8,158,298	2,494,542	15,930	17,652	51.2	14.1	53.0	14.6
1966	8,726,423	2,702,759	16,925	18,984	51.6	14.2	51.7	14.2
1967	9,375,727	2,898,741	18,100	20,087	51.8	14.4	51.8	14.4
1968	9,794,826	3,168,688	18,593	21,548	52.7	14.7	51.4	14.3
1969	10,426,680	3,455,615	18,886	22,838	55.2	15.1	51.8	14.2
1970	11,173,726	3,745,680	20,401	24,154	54.8	15.5	49.6	14.0
1971	11,692,998	4,085,482	20,033	24,805	58.4	16.5	51.3	14.5
1972	11,706,510	4,180,462	20,041	24,792	58.4	16.9	49.0	14.2
1973	13,057,905	4,894,072	19,493	24,746	67.0	19.8	49.7	14.7
1974	21,580,549	6,573,402	18,575	23,689	116.2	27.7	72.6	17.3

Sources: Dollar value and production, U.S. Bureau of Mines
U.S. Bureau of Labor Statistics, Wholesale Price Index
Price at wellhead computed by the American Petroleum Institute

Section VI
Table 7a

TOTAL DOLLAR VALUE OF U.S. CRUDE OIL AND NATURAL GAS AT THE WELLHEAD

Year	VALUE (Thousand dollars) Oil	VALUE (Thousand dollars) Gas	PRODUCTION (Trillion BTU) Oil	PRODUCTION (Trillion BTU) Gas	PRICE AT WELLHEAD (Cents per million BTU) Oil	PRICE AT WELLHEAD (Cents per million BTU) Gas	PRICE AT WELLHEAD (1967 constant cents per million BTU) Oil	PRICE AT WELLHEAD (1967 constant cents per million BTU) Gas
1975	$23,116,059	$ 8,945,062	17,729	20,531	130.4	43.6	74.5	24.9
1976	24,229,540	11,571,776	17,262	20,371	140.4	56.8	76.7	31.0
1977	25,790,722	15,824,954	17,454	20,025	147.8	77.4	76.1	39.9
1978	28,477,824	18,084,914	18,420	20,393	154.4	88.7	73.8	42.4
1979	39,051,332	24,113,634	18,064	20,901	216.7	115.4	92.0	49.0
1980	65,722,016	32,043,704	18,249	20,482	360.2	156.4	134.1	58.2
1981	99,396,384(1)	39,551,253	18,147	20,255	547.8	190.3	186.7	64.9
1982	90,029,512(1)	45,496,765	18,309	18,797	491.7	242.0	164.3	80.9
1983	82,745,734(1)	43,614,369	18,325	18,757	451.5	288.8	149.0	95.3
1984	84,102,132(1)	48,404,611	18,848	20,217	446.2	295.0	143.8	95.1
1985	78,851,236(1)	43,182,598	18,992	19,124	415.2	279.1	134.5	90.4
1986	39,634,833(1)	32,607,825	18,376	18,638	215.7	215.3	71.7	71.6
1987	46,960,095(1)	28,888,630	17,675	19,292	265.7	185.7	86.4	60.4

(1) Estimate computed by API based on wellhead price times production.

Sources: Dollar value and production, U.S. Energy Information Administration
Producer Price Index, U.S. Bureau of Labor Statistics
Price at wellhead computed by the American Petroleum Institute

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Table 8

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-	$2.90
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	$1.58	2.20
Arizona	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas	$1.82	$2.48	$2.48	$2.46	$2.48	$2.46	$2.60	$2.73	$2.71	$2.69	$2.92	$2.82	$2.77	$2.77
California	1.72	2.42	2.26	2.16	2.25	2.23	2.49	2.55	2.50	2.62	3.05	2.90	2.55	2.46
Colorado	1.89	2.56	2.55	2.55	2.54	2.55	2.71	2.77	2.75	2.78	3.02	2.99	2.90	2.90
Florida	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	2.10	2.77	2.77	2.77	2.77	2.76	2.89	2.98	2.91	2.93	3.12	3.00	2.99	2.96
Indiana	2.10	2.77	2.77	2.76	2.75	2.75	2.93	2.96	2.91	2.93	3.13	3.01	2.97	2.94
Kansas	1.93	2.60	2.58	2.57	2.57	2.56	2.69	2.81	2.80	2.79	3.01	3.00	2.91	2.90
Kentucky	2.11	2.77	2.76	2.76	2.77	2.76	2.91	2.92	2.89	2.91	3.13	2.95	2.81	2.85
Louisiana	2.01	2.68	2.66	2.65	2.65	2.64	2.81	2.93	2.93	2.93	3.32	3.26	3.16	3.14
Michigan	2.13	2.86	2.75	2.70	2.72	2.66	2.92	2.96	2.92	2.87	3.06	2.94	2.94	2.91
Mississippi	1.76	2.41	2.46	2.31	2.24	2.23	2.36	2.50	2.46	2.45	2.91	2.86	2.84	2.83
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana	1.94	2.58	2.58	2.52	2.47	2.25	2.16	2.20	2.26	2.58	2.70	2.65	2.56	2.41
Nebraska	1.85	2.43	2.21	2.13	2.33	2.44	2.71	2.75	2.75	2.79	2.98	2.94	2.88	2.87
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	1.77	2.45	2.44	2.43	2.45	2.47	2.63	2.75	2.74	2.75	2.99	2.98	2.85	2.85
New York	4.21	4.94	3.56	3.78	4.23	4.23	4.28	3.42	3.55	4.40	4.73	4.23	4.24	4.64
North Dakota	-	-	-	-	-	2.00	2.00	2.14	2.89	2.90	3.13	2.99	2.80	2.71
Ohio	3.36	4.22	2.93	3.03	3.05	2.99	2.69	2.76	2.89	3.14	3.23	2.89	2.87	2.97
Oklahoma	1.92	2.58	2.56	2.57	2.57	2.56	2.70	2.79	2.78	2.78	3.03	2.96	2.92	2.92
Pennsylvania	4.19	4.96	3.57	3.82	4.25	4.25	4.29	3.42	3.54	4.34	4.73	4.10	4.20	4.55
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	1.95	2.61	2.59	2.59	2.58	2.58	2.73	2.84	2.84	2.83	3.11	3.06	2.98	2.96
Utah	-	-	-	-	-	-	-	-	-	-	2.27	2.99	2.86	2.74
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	3.90	4.76	3.09	3.33	3.76	3.76	3.81	2.93	3.05	3.86	4.26	3.49	3.60	4.07
Wyoming	1.68	2.33	2.28	2.16	2.15	2.18	2.37	2.45	2.41	2.44	2.66	2.61	2.50	2.51
Other	1.53	2.00	2.00	2.00	2.00	2.00	2.09	2.29	2.18	2.26	2.90	2.93	2.94	2.45
Total	1.93	2.60	2.54	2.51	2.53	2.53	2.68	2.78	2.77	2.79	3.09	3.01	2.90	2.88

Source: U.S. Bureau of Mines. Annual Petroleum Statements

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Table 8a

U.S. AVERAGE WELLHEAD VALUE PER BARRELOF CRUDE OIL BY STATE

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	$2.75	$2.59	$2.59	$2.60	$2.61	$2.60	$2.65	$2.67	$2.70	$2.84	$3.00	$3.07	$3.58	$8.54	$10.13	10.57	9.67	10.77	14.94	20.57
Alaska	2.79	3.04	3.04	3.04	3.06	3.06	3.13	2.82	2.90	3.01	3.24	3.23	3.62	4.92	5.22	5.03	5.84	6.02	10.74	15.63
Arizona	-	-	-	-	2.85	2.80	2.80	2.85	2.90	2.96	3.17	2.25	3.86	5.25	5.25	5.25	5.25	5.92	8.29	12.30
Arkansas	2.75	2.66	2.66	2.66	2.66	2.66	2.70	2.73	2.83	2.87	3.11	3.15	3.92	7.43	8.88	9.65	9.93	12.94	14.73	24.17
Calif.	2.43	2.50	2.48	2.43	2.38	2.35	2.31	2.35	2.45	2.54	2.72	2.71	3.11	5.30	6.03	6.15	7.31	7.22	12.60	22.72
Colorado	2.88	2.88	2.88	2.88	2.88	2.91	2.92	2.95	3.12	3.18	3.39	3.41	4.25	7.57	9.60	9.65	10.10	9.92	13.14	20.69
Florida	-	-	-	-	-	-	-	-	-	-	-	3.18	4.59	9.66	11.71	11.24	11.67	12.00	13.07	18.84
Illinois	2.99	2.98	2.98	2.93	2.93	3.00	3.04	3.07	3.18	3.25	3.47	3.47	4.32	8.87	10.48	10.18	12.27	13.80	23.49	35.36
Indiana	2.98	2.98	2.96	2.85	2.84	3.00	2.98	3.05	3.19	3.20	3.42	3.42	3.92	8.62	10.54	10.89	12.46	13.29	23.56	35.15
Kansas	2.89	2.91	2.91	2.92	2.92	2.95	3.00	3.02	3.20	3.27	3.52	3.52	4.25	7.96	9.50	9.50	10.00	13.20	22.00	34.21
Kentucky	2.97	2.95	2.92	2.87	2.87	2.85	2.90	2.93	3.11	3.15	3.36	3.36	3.97	8.72	11.19	11.42	13.02	13.73	22.58	34.98
Louisiana	3.15	3.15	3.12	3.11	3.10	3.11	3.12	3.14	3.30	3.38	3.59	3.59	4.00	6.53	7.09	7.51	8.33	9.42	11.40	19.38
Michigan	2.92	2.85	2.85	2.81	2.79	2.87	2.89	2.95	3.07	3.10	3.27	3.20	4.07	8.59	10.74	10.84	11.00	12.34	14.94	21.55
Miss.	2.82	2.78	2.76	2.67	2.64	2.65	2.72	2.80	2.92	2.99	3.15	3.15	3.81	6.10	6.66	7.14	8.20	8.11	13.95	15.80
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
Montana	2.42	2.42	2.44	2.43	2.43	2.44	2.50	2.57	2.69	2.78	3.01	3.07	3.33	6.65	7.83	8.42	8.58	9.25	12.39	22.24
Nebraska	2.85	2.83	2.83	2.70	2.66	2.72	2.75	2.79	2.98	3.09	3.38	3.38	3.87	6.83	9.01	8.99	10.46	11.40	16.75	30.49
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
New Mex.	2.86	2.88	2.88	2.87	2.81	2.84	2.92	2.95	3.13	3.20	3.40	3.41	4.10	7.22	8.29	8.84	9.23	10.01	14.06	23.82
New York	4.76	4.60	4.59	4.44	4.44	4.57	4.58	4.63	4.52	4.52	4.70	4.81	5.60	10.65	12.22	12.25	14.20	14.74	23.78	37.39
N. Dakota	2.72	2.75	2.73	2.48	2.50	2.55	2.60	2.64	2.80	3.05	3.27	3.28	3.90	6.04	7.32	7.84	8.00	8.55	12.00	14.99
Ohio	3.09	3.10	3.15	2.93	2.94	3.00	3.17	3.19	3.29	3.34	3.60	3.76	5.08	9.83	11.89	11.77	13.16	13.81	22.52	36.23
Oklahoma	2.91	2.92	2.91	2.90	2.89	2.91	2.93	2.99	3.12	3.19	3.40	3.41	3.78	7.18	8.52	9.19	9.98	10.90	15.03	27.38
Penn.	4.71	4.57	4.56	4.32	4.32	4.45	4.49	4.49	4.52	4.52	4.66	4.77	5.62	10.41	12.15	12.16	14.29	14.77	24.09	37.44
S. Dakota	-	-	-	2.00	2.00	2.00	2.38	2.15	2.29	2.34	2.59	2.62	3.59	6.65	12.70	12.35	12.00	12.13	25.28	28.75
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.51	13.72	13.75	12.70	20.26	34.29
Texas	2.97	2.99	2.97	2.96	2.96	2.97	3.01	3.04	3.21	3.28	3.48	3.48	3.98	6.95	7.64	8.59	8.78	9.29	12.62	21.59
Utah	2.75	2.74	2.72	2.62	2.61	2.64	2.63	2.67	2.80	2.81	3.04	3.04	3.61	7.11	8.23	9.30	9.33	9.98	11.41	19.80
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Va.	4.14	4.00	3.99	3.85	3.85	3.98	4.00	3.97	3.83	3.80	3.91	4.50	5.02	10.15	11.99	12.00	13.97	14.50	28.00	37.00
Wyoming	2.50	2.49	2.50	2.53	2.50	2.56	2.58	2.64	2.80	2.93	3.10	3.09	3.82	6.53	7.24	7.24	7.62	9.16	8.50	21.37
Other	2.31	2.10	2.06	2.14	2.10	2.19	2.28	2.30	2.47	2.52	2.91	2.89	3.48	8.72	6.33	11.22	10.98	9.82	12.41	19.14
Total	2.89	2.90	2.89	2.88	2.86	2.88	2.92	2.94	3.09	3.18	3.39	3.39	3.89	6.74	7.56	8.14	8.57	8.96	12.51	20.89

(1) Included with other.

Source: U.S. Bureau of Mines. Annual Petroleum Statements

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Table 8b

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE
(Dollars per Barrel)

STATE	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Alabama	$10.57	$9.67	$10.52	$11.79	$20.57	$35.80	$32.32	$30.07	$29.39	$25.77	$13.91
Alaska	5.03	6.14	5.23	10.25	16.52	23.60	20.08	17.92	18.13	17.12	6.71
Arizona(1)	5.25	5.25	5.92	8.29	12.30	24.00	31.00	30.00	28.00	27.00	15.15
Arkansas	9.65	9.93	10.63	14.72	24.17	33.69	30.12	28.28	28.15	25.79	14.54
California	6.15	7.31	8.58	12.78	23.87	26.80	24.58	22.61	22.09	22.14	11.90
Colorado	9.65	10.10	10.84	13.28	22.91	35.69	31.56	28.92	28.09	25.64	13.98
Florida(1)	11.24	11.67	12.00	13.07	18.84	25.00	32.00	31.10	31.00	29.00	23.13
Illinois	10.18	12.27	13.81	23.49	35.78	36.03	31.69	29.12	28.76	26.90	14.70
Indiana	10.89	12.46	13.70	23.28	35.91	36.07	31.66	29.06	28.72	26.82	14.55
Kansas	9.50	10.00	13.20	21.57	34.20	35.80	30.79	28.45	27.99	25.33	14.02
Kentucky	11.42	13.02	13.73	22.55	34.98	35.90	31.19	28.60	28.24	26.20	14.20
Louisiana	7.51	8.33	9.03	11.42	19.87	35.45	32.44	30.02	29.67	27.22	15.32
Michigan	10.84	11.00	11.86	14.47	23.54	35.74	31.80	28.93	28.54	26.16	14.61
Mississippi	7.14	8.20	7.91	10.74	20.85	30.47	29.04	26.76	27.26	25.51	13.63
Missouri(1)	13.30	12.50	12.25	25.68	37.75	34.38	31.25	31.20	27.50	25.00	15.25
Montana	8.42	8.58	9.04	12.03	20.53	34.69	31.25	28.80	28.07	25.29	13.58
Nebraska	8.99	10.46	11.40	18.13	30.60	35.32	30.98	28.58	27.83	25.42	13.70
Nevada(1)	10.35	11.50	12.00	11.54	16.65	23.96	23.95	23.80	25.80	26.00	12.00
New Mexico	8.84	9.23	10.17	14.33	24.06	35.04	31.82	29.26	28.69	26.84	14.93
New York	12.25	14.20	14.74	23.78	37.39	34.15	30.91	28.19	27.70	25.19	16.03
North Dakota	7.84	8.00	9.75	13.64	26.42	35.63	31.89	29.27	28.39	25.32	13.54
Ohio	11.77	13.16	13.80	22.79	36.64	36.11	30.90	28.14	27.71	25.11	15.51
Oklahoma	9.19	9.98	11.30	17.53	29.25	35.43	32.04	29.67	29.11	26.28	14.47
Pennsylvania	12.16	14.29	14.72	24.13	37.46	36.03	30.77	28.28	27.71	25.05	15.77
South Dakota	12.35	12.00	12.16	15.35	28.81	35.55	31.63	29.10	28.36	25.79	13.81
Tennessee(1)	13.72	13.75	12.70	20.26	34.29	33.00	32.10	32.00	29.00	26.00	15.00
Texas	8.59	8.78	9.29	12.65	21.84	35.06	31.77	29.35	28.87	26.80	14.73
Utah	9.30	9.33	9.98	11.41	19.79	34.14	30.50	28.12	27.21	23.98	13.33
Virginia(1)	11.68	12.50	12.50	24.80	37.21	36.25	32.35	32.25	27.28	24.75	15.00
West Virginia	12.00	13.97	14.48	23.35	36.92	35.63	29.98	27.27	26.90	24.35	14.68
Wyoming	7.24	7.62	9.16	11.73	21.34	32.30	29.37	27.19	26.73	24.67	12.94
U.S. TOTAL	8.15	8.57	9.00	12.64	21.59	31.77	28.52	26.19	25.88	24.09	12.51

(1) Beginning in 1981, these figures were estimated by IPAA (including years proir to 1981).
Note: Data represent the average first purchase prices of crude at the lease or wellhead.

Source: Department of Energy, Energy Information Administration, Petroleum Marketing Monthly.

U.S. AVERAGE WELLHEAD VALUE PER BARREL OF CRUDE OIL BY STATE
(Dollars per Barrel)

State	1987
Alabama	16.76
Alaska	10.95
Arizona(2)	17.35
Arkansas	17.23
California	13.91
Colorado	17.71
Florida(2)	16.05
Illinois	17.53
Indiana	17.49
Kansas	17.37
Kentucky	17.19
Louisiana	17.97
Michigan	17.63
Mississippi	16.78
Missouri(2)	17.25
Montana	16.57
Nebraska	17.07
Nevada(2)	11.50
New Mexico	17.58
New York	17.40
North Dakota	16.74
Ohio	17.42
Oklahoma	17.62
Pennsylvania	17.43
South Dakota	16.96
Tennessee(2)	15.84
Texas	17.54
Utah	17.25
Virginia(2)	15.75
West Virginia	16.56
Wyoming	16.44
U.S. TOTAL	15.41

(2) Prices for these states was estimated by the IPAA
Note: Data represent the average first purchase prices of crude at the lease or wellhead.

Source: Department of Energy, Energy Information Administration.

Section VI
Table 9

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Alabama	-	-	-	5.0	5.0	4.0	5.0	6.0	7.1	7.9	6.4	9.2	9.7	7.3
Alaska	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0	12.2
Arizona	-	-	-	-	-	-	-	-	-	14.0	-	-	-	-
Arkansas	3.6	4.5	4.0	3.5	4.0	4.1	5.3	5.5	5.6	6.0	7.2	8.1	8.7	11.9
California	10.2	11.3	11.8	11.9	14.6	16.7	19.7	20.6	22.2	22.5	23.7	23.3	24.6	26.7
Colorado	7.9	6.0	5.2	3.9	4.3	5.5	5.8	8.7	9.9	9.8	10.0	10.5	11.0	11.9
Florida	3.2	3.7	4.1	5.2	7.3	6.7	6.8	8.3	10.4	8.3	13.0	13.6	14.3	16.2
Illinois	9.2	12.3	11.3	10.1	15.3	16.2	16.8	14.2	12.9	15.1	15.5	14.8	13.9	12.5
Indiana	9.1	9.8	7.4	7.0	9.8	9.5	7.0	6.0	12.4	12.1	13.1	15.6	19.0	17.8
Kansas	5.1	5.0	5.4	6.6	8.1	8.3	8.6	10.6	11.1	11.3	11.4	11.4	12.0	11.7
Kentucky	15.0	18.4	19.1	19.7	21.7	21.7	21.9	22.8	23.7	23.1	23.8	24.1	23.7	24.4
Louisiana	3.6	3.9	4.4	5.3	5.8	6.7	8.2	8.9	11.3	11.4	11.2	12.9	15.4	17.1
Maryland	-	-	-	19.8	20.0	19.4	19.0	20.2	20.1	25.3	26.2	26.9	27.0	26.6
Michigan	12.7	14.7	15.2	13.2	14.8	14.6	16.4	17.8	11.5	13.3	18.8	18.6	23.0	21.4
Mississippi	5.0	5.6	6.2	6.3	6.3	6.1	8.0	8.3	9.6	9.8	10.3	13.9	15.5	18.8
Missouri	13.2	18.5	16.7	14.3	14.3	18.8	20.0	18.8	20.0	16.7	16.7	-	-	25.0
Montana	4.6	4.6	5.6	5.3	5.5	6.1	5.9	6.8	6.1	6.8	7.2	6.8	7.5	7.1
Nebraska	-	-	-	11.8	12.8	13.3	13.5	11.7	20.4	21.0	16.0	15.0	15.9	17.5
New Mexico	1.8	2.7	2.9	3.0	3.8	4.6	6.1	7.8	8.9	8.8	9.4	10.4	10.0	10.7
New York	24.3	22.1	24.6	25.1	25.1	29.2	31.6	32.6	29.5	28.3	28.4	30.6	30.5	30.9
North Dakota	3.2	3.0	5.2	5.1	5.2	6.1	6.8	6.3	7.7	8.1	9.5	9.7	9.9	11.4
Ohio	19.7	19.7	19.3	19.4	20.2	21.7	22.2	21.2	22.5	24.0	23.7	21.4	23.2	23.5
Oklahoma	3.9	4.9	4.7	4.9	5.3	5.4	6.9	7.0	7.4	8.0	8.3	10.1	10.0	11.9
Pennsylvania	23.7	24.1	25.6	25.3	27.7	28.3	29.1	29.9	29.9	32.2	31.1	28.3	29.2	31.8
South Dakota	6.0	6.5	6.3	-	5.0	5.0	5.0	5.0	-	-	-	-	-	-
Tennessee	6.3	9.4	9.1	10.0	9.4	10.3	12.0	11.5	12.9	12.9	15.8	16.7	16.7	17.5
Texas	3.7	4.5	4.6	4.7	5.4	6.2	7.6	8.5	8.0	8.7	9.7	10.0	10.8	11.3
Utah	5.4	6.0	6.0	6.0	6.6	7.5	11.4	14.1	13.9	14.1	14.7	14.7	14.2	18.0
Virginia	9.4	9.5	7.7	8.7	15.6	24.6	25.8	27.1	26.8	27.7	26.8	27.0	26.2	27.1
West Virginia	15.4	16.7	16.2	16.8	18.6	19.6	23.6	23.8	23.5	23.7	23.8	24.8	26.0	26.2
Wyoming	5.0	5.9	5.6	6.0	7.5	7.8	7.9	8.4	8.5	8.6	8.7	8.4	8.1	12.0
Total	6.0	6.5	6.3	6.5	7.3	7.8	9.2	10.1	10.4	10.8	11.3	11.9	12.9	14.0

Source: U.S. Bureau of Mines, Minerals Yearbooks and Natural Gas Annuals

Section VI
Table 9a

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Alabama	7.4	9.8	11.8	10.9	12.7	12.8	12.7	13.1	13.4	13.9	15.1	35.2	38.2	74.3	87.0	98.5
Alaska	20.4	21.4	24.7	27.6	24.8	24.8	25.0	25.3	25.9	24.6	14.7	14.7	14.9	17.0	30.2	38.9
Arizona	-	11.9	12.1	12.0	12.1	13.8	15.4	16.1	17.5	17.1	17.8	18.1	18.4	20.0	28.0	28.2
Arkansas	13.5	14.9	15.5	15.6	15.6	15.6	15.3	15.6	15.8	16.3	17.1	17.3	18.4	26.0	34.7	53.0
California	23.3	29.0	29.3	30.1	30.9	31.0	29.7	30.9	30.6	32.1	32.6	36.8	37.3	44.0	70.0	94.0
Colorado	11.6	11.6	11.7	11.9	12.9	13.0	13.3	13.5	14.5	14.7	15.6	16.5	17.7	20.0	26.0	48.0
Florida	18.9	20.7	20.0	13.5	12.9	14.2	14.8	15.2	15.7	-	29.9	32.0	34.3	53.6	97.3	98.2
Illinois	12.8	14.3	12.9	11.6	11.7	11.9	11.7	12.6	14.1	15.7	28.0	28.0	35.0	40.0	70.0	98.5
Indiana	20.1	21.1	23.4	23.6	23.6	23.7	23.4	23.4	23.6	23.7	16.5	15.5	13.8	14.0	39.0	52.0
Kansas	12.5	12.4	13.3	12.6	13.3	13.5	13.4	13.8	13.9	14.0	14.4	14.4	15.5	16.6	17.2	42.0
Kentucky	24.8	24.8	23.9	23.7	23.6	23.7	24.0	25.0	25.1	24.6	25.1	25.1	35.0	50.0	54.0	55.0
Louisiana	18.7	19.7	19.8	19.1	18.2	18.3	18.5	18.9	19.2	19.3	20.2	20.4	22.4	30.7	42.3	46.0
Maryland	27.2	27.0	26.9	26.7	25.2	26.0	25.6	25.6	25.4	24.9	20.0	20.9	23.3	24.0	27.0	32.3
Michigan	21.1	21.3	27.1	25.4	25.1	15.2	24.7	25.1	25.7	26.7	26.4	30.7	39.2	50.4	63.4	89.5
Mississippi	18.6	19.0	18.0	17.4	17.3	17.4	17.3	16.7	17.6	18.4	20.9	21.8	22.9	29.5	49.6	71.0
Missouri	24.7	25.0	27.0	24.3	24.5	-	24.5	28.6	13.8	24.5	24.8	24.9	24.2	31.4	34.0	34.5
Montana	7.4	7.4	7.5	7.8	8.2	8.3	8.4	9.1	10.2	10.3	12.1	12.3	23.6	25.3	43.3	44.5
Nebraska	16.7	18.2	18.8	15.4	14.6	15.9	17.2	17.5	17.3	17.1	17.5	17.8	18.2	34.0	54.1	51.3
New Mexico	10.9	11.5	11.9	11.7	11.8	12.5	13.0	13.4	13.7	14.3	15.0	18.5	23.6	31.4	40.5	56.5
New York	29.5	28.1	29.5	31.0	30.8	31.0	31.3	31.9	30.0	30.3	30.0	32.6	35.0	55.0	74.0	113.0
North Dakota	12.6	13.7	19.1	22.1	16.0	16.2	16.4	16.5	16.2	16.4	16.7	16.8	19.7	19.9	23.0	34.0
Ohio	24.9	25.6	24.2	23.9	23.6	23.7	24.1	24.7	25.8	27.1	33.8	39.2	42.5	48.2	70.6	101.8
Oklahoma	12.1	12.8	13.0	12.7	13.8	14.0	14.3	14.2	15.3	15.6	16.3	16.3	18.9	28.0	32.0	50.2
Pennsylvania	29.4	27.2	26.0	27.3	26.7	28.4	28.1	27.8	17.6	27.9	27.2	30.3	42.0	44.0	67.5	68.5
Tennessee	18.3	18.5	18.9	19.5	19.0	-	19.0	19.4	19.6	19.9	22.1	30.0	30.0	36.0	43.0	71.0
Texas	12.3	12.3	12.5	12.5	12.9	13.0	13.2	13.5	13.7	14.4	16.1	16.4	20.4	31.1	51.9	71.8
Utah	15.7	16.8	18.2	13.7	12.5	12.7	13.2	15.8	15.4	15.1	16.7	17.0	19.1	41.2	48.0	50.5
Virginia	27.1	27.1	23.4	29.9	29.9	30.0	30.1	29.9	29.7	30.8	31.4	32.0	33.1	51.0	51.5	114.0
West Virginia	27.4	27.5	26.6	25.1	23.5	23.6	24.1	26.2	27.0	25.4	25.9	30.0	30.9	32.8	36.9	57.0
Wyoming	12.5	14.6	14.2	12.9	13.5	14.5	14.6	14.6	14.7	14.7	15.3	16.2	18.1	24.5	33.7	41.0
Total	15.1	15.5	15.8	15.4	15.6	15.7	16.0	16.4	16.7	17.1	18.2	18.6	21.6	30.4	44.5	58.0

Source: U.S. Bureau of Mines, Minerals Yearbooks and Natural Gas Annuals

U.S. AVERAGE WELLHEAD VALUE OF NATURAL GAS BY STATE
(cents per thousand cubic feet)

STATE	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	147.0	150.0	203.9	318.6	477.0	344.0	428.0	373.0	371.0	289.0	297.0
Alaska	40.2	52.1	51.8	73.2	62.0	63.0	73.0	73.0	74.0	50.0	94.0
Arizona	33.5	37.0	41.3	NA	NA	259.0	308.0	290.0	NA	NA	NA
Arkansas	58.5	75.0	95.9	69.6	181.0	213.0	229.0	254.0	255.0	251.0	229.0
California	116.9	135.7	170.5	217.0	257.0	309.0	357.0	380.0	336.0	289.0	237.0
Colorado	81.0	84.0	141.0	147.0	197.0	317.0	338.0	343.0	290.0	205.0	176.0
Florida	108.9	139.0	157.2	173.0	271.0	246.0	233.0	257.0	243.0	120.0	168.0
Illinois	120.0	129.0	186.1	190.0	247.0	262.0	284.0	278.0	277.0	257.0	224.0
Indiana	69.0	71.0	105.4	135.0	208.0	155.0	209.0	338.0	251.0	123.0	171.0
Kansas	48.5	57.0	75.6	77.2	92.0	151.0	157.0	149.0	127.0	121.0	115.0
Kentucky	55.0	58.0	94.7	89.3	101.0	152.0	151.0	170.0	239.0	188.0	182.0
Louisiana	70.3	83.6	111.5	160.7	207.0	260.0	267.0	273.0	266.0	221.0	178.0
Maryland	39.0	61.4	103.6	45.6	48.0	78.0	55.0	55.0	59.0	65.0	55.0
Michigan	101.0	119.7	174.0	235.5	286.0	319.0	358.0	376.0	360.0	360.0	324.0
Mississippi	73.0	114.6	160.0	231.7	321.0	391.0	378.0	347.0	317.0	213.0	194.0
Missouri	42.0	--	--	--	--	--	--	375.0	350.0	375.0	375.0
Montana	71.9	84.7	121.1	145.4	191.0	215.0	241.0	246.0	239.0	205.0	180.0
Nebraska	65.2	68.0	85.0	82.9	145.0	199.0	293.0	224.0	301.0	282.0	242.0
New Mexico	81.0	98.8	136.6	175.8	213.0	247.0	268.0	271.0	262.0	187.0	166.0
New York	116.0	119.0	126.6	194.9	267.0	375.0	385.0	400.0	337.0	339.0	200.0
North Dakota	35.3	46.2	128.0	118.8	194.0	230.0	227.0	226.0	190.0	135.0	130.0
Ohio	139.7	157.0	180.5	197.7	217.0	271.0	324.0	319.0	308.0	284.0	258.0
Oklahoma	79.0	90.2	112.4	150.7	188.0	274.0	283.0	272.0	247.0	171.0	147.0
Oregon	--	--	213.0	240.0	260.0	333.0	333.0	278.0	240.0	200.0	145.0
Pennsylvania	80.0	86.0	132.6	212.7	233.0	280.0	300.0	325.0	316.0	250.0	225.0
South Dakota	--	--	210.7	NA	275.0	308.0	337.0	367.0	251.0	246.0	271.0
Tennessee	74.0	164.0	170.0	176.0	255.0	300.0	250.0	350.0	248.0	178.0	131.0
Texas	90.3	99.5	123.4	156.5	187.0	217.0	236.0	245.0	233.0	165.0	147.0
Utah	61.2	64.3	71.6	111.7	110.0	306.0	340.0	408.0	352.0	290.0	188.0
Virginia	126.0	131.3	168.1	285.0	215.0	369.0	330.0	300.0	302.0	245.0	208.0
West Virginia	61.0	65.8	105.0	300.0	300.0	320.0	310.0	345.0	385.0	390.0	385.0
Wyoming	64.0	79.3	113.0	192.0	277.0	322.0	318.0	332.0	301.0	252.0	176.0
Total	79.0	90.5	117.8	159.0	198.0	246.0	259.0	266.0	251.0	194.0	167.0

Source: U.S. Energy Information Administraton, Natural Gas Annuals

Section VI
Table 10

POSTED PRICES OF KEY FOREIGN CRUDE OILS

(In U.S. $ per barrel. Postings in effect on dates shown or thereabouts.)
Prices are not actual sales prices, but prices posted by governments for computing oil company taxes.

CRUDE & GRAVITY		1970	1971(1)	1972	1973(1)				1974			1975		1977	
		31 Aug	15 Feb	20 Jan	1 Jan	1 Oct	16 Oct	1 Nov	1 Jan	1 July	1 Nov	1 Jan	1 Oct	1 Jan	1 July
PERSIAN/ARABIAN GULF CRUDES															
Saudi Arabia															
Arab Light	34°	1.80	2.18	2.48	2.59	3.01	5.12	5.18	11.65	11.25	11.25	11.25	12.38	13.00	13.66
Arab Berri	39	1.90	2.26	2.55	2.67	3.09	5.68	5.74	12.35	12.35	11.95	11.95	12.77	13.42	14.22
Arab Medium	31	1.59	2.09	2.37	2.48	2.88	4.90	4.96	11.56	11.56	11.16	11.16	12.23	12.57	13.25
Arab Heavy	27	1.47	1.97	2.24	2.35	2.73	4.63	4.68	11.44	11.44	11.04	11.04	12.09	12.23	12.92
Iran															
Iran Light	34	1.79	2.17	2.47	2.58	3.00	5.34	5.40	11.88	11.88	11.48	11.48	12.50	13.77	13.77
Iran Heavy	31	1.63	2.13	2.41	2.53	2.94	4.99	5.05	11.64	11.64	11.24	11.24	12.36	13.43	13.43
Kuwait															
Kuwait	31	1.59	2.09	2.37	2.48	2.88	4.90	4.96	11.55	11.55	11.15	11.15	12.26	NA	NA
Abu Dhabi															
Murban	39	1.88	2.24	2.54	2.65	3.08	6.05	6.11	12.64	12.64	12.24	11.69	12.82	13.44	14.26
Marine (Umm Shaif)	37	1.86	2.23	2.53	2.64	3.07	5.54	5.60	12.09	12.09	11.69	11.45	12.58	13.20	14.02
Zakum	40	1.92	2.27	2.57	2.69	3.12	5.96	6.03	12.57	12.57	12.17	11.59	12.72	13.34	14.16
Iraq															
Basrah	35	1.72	2.16	2.45	2.56	2.98	5.06	5.12	11.67	11.67	11.27	11.28	12.40	NA	NA
Qatar															
Dukhan	40	1.93	2.28	2.59	2.71	3.14	5.83	5.90	12.41	12.41	12.01	12.01	12.74	14.18	14.18
Marine	36	1.83	2.20	2.50	2.61	3.04	5.50	5.56	12.01	12.01	11.61	11.61	12.54	13.98	13.98
Oman															
Oman	34	1.84	2.22	2.52	2.63	3.06	5.74	5.80	12.30	12.30	11.90	11.90	12.51	13.68	13.98
MEDITERRANEAN & AFRICAN CRUDES															
Saudi Arabia															
Arab Light	34	2.17	2.37	3.37	3.45	4.21	7.15	7.23	13.65	13.65	13.25	13.25	13.25	NA	NA
Iraq															
Kirkuk	36	2.21	2.41	3.40	3.48	4.24	7.21	7.29	NA	NA	NA	NA	NA	NA	NA
Libya															
Libya	40	2.18	2.55	3.67	3.78	4.60	8.93	9.06	15.77	15.77	15.77	15.77	16.06	18.25	18.78
Nigeria															
Nigeria	34	2.17	2.42	3.18	3.56	4.29	8.31	8.40	14.69	14.69	14.69	14.69	13.07	NA	NA
VENEZUELAN CRUDES (Reference Prices)															
Venezuela															
Tia Juana	26	2.01	2.09	2.95	3.09	4.93	4.93	7.26	13.84	14.31	14.31	13.54	14.64	NA	NA
Tia Juana	31	2.19	2.27	3.09	3.25	5.20	5.20	7.56	14.36	14.91	14.91	14.13	15.58	NA	NA
Oficina	35	2.34	2.42	3.26	3.40	5.45	5.45	7.80	14.86	15.44	15.44	14.67	16.17	NA	NA

NA Not Available
(1) Representative postings. Does not include price changes for 1 June 1971; 1 April, 1 June, 1 July, 1 August, 1 December 1973.

Source: Petroleum Intelligence Weekly

Section VI
Table 10a

POSTED PRICES OF KEY FOREIGN CRUDE OILS

(In U.S. $ per barrel. Postings in effect on dates shown or thereabouts.)
Prices are not actual sales prices, but prices posted by governments for computing oil company taxes.

PERSIAN/ARABIAN GULF CRUDES

CRUDE & GRAVITY		1979 1 Jan
Saudi Arabia		
Arab Light	34o	14.34
Arab Berri	39	14.93
Arab Medium	31	13.91
Arab Heavy	27	13.57
Iran		
Iran Light	34	14.45
Iran Heavy	31	14.10
Kuwait		
Kuwait	31	NA
Abu Dhabi		
Murban	39	14.97
Marine (Umm Shaif)	37	14.72
Zakum	40	14.87
Iraq		
Basrah	35	NA
Qatar		
Dukhan	40	14.89
Marine	36	14.68
Oman		
Oman	34	14.68

NOTE:
Posted prices are no longer available

MEDITERRANEAN & AFRICAN CRUDES

CRUDE & GRAVITY		1979 1 Jan
Saudi Arabia		
Arab Light	34	NA
Iraq		
Kirkuk	36	NA
Libya		
Libya	40	19.72
Nigeria		
Nigeria	34	NA

VENEZUELAN CRUDES (Reference Prices)

CRUDE & GRAVITY		1979 1 Jan
Venezuela		
Tia Juana	26	NA
Tia Juana	31	NA
Oficina	35	NA

NA Not Available

Source: Petroleum Intelligence Weekly

Table 11

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE & GRAVITY		1974				1975			1976		1977	
		1 Jan.	1 June	1 Oct.	1 Nov.	1 Jan.	1 Oct.	14 Feb.	1 June	1 Oct.	1 Jan.	1 July
						PERSIAN / ARABIAN CRUDES						
Saudi Arabia												
Arab Light	34o	10.95	11.05	10.84	10.46	10.46	11.51	11.51	11.51	11.51	12.09	12.70
Arab Berri	39	11.61	11.71	11.49	11.11	11.11	11.87	11.87	11.87	11.87	12.48	13.22
Arab Medium	31	10.87	10.97	10.75	10.38	10.38	11.33	11.33	11.28	11.28	11.69	12.32
Arab Heavy	27	10.76	10.85	10.64	10.27	10.27	11.14	11.14	11.14	11.04	11.37	12.02
Iran												
Iran Light	34	11.16	11.26	11.04	10.67	10.67	11.62	11.62	11.62	11.62	12.81	12.81
Iran Heavy	31	10.94	11.04	10.82	10.45	10.45	11.50	11.40	11.33	11.33	12.49	12.49
Kuwait												
Kuwait	31	10.85	10.95	10.74	10.37	10.37	11.30	11.30	11.23	11.23	12.37	12.27
Abu Dhabi												
Murban	39	11.88	11.88	11.75	11.38	10.87	11.92	11.92	11.92	11.92	12.50	13.26
Umm Shaif	37	11.36	11.36	11.24	10.87	10.65	11.70	11.70	11.70	11.70	12.28	13.04
Zakum	40	11.81	11.81	11.69	11.31	10.78	11.83	11.83	11.83	11.83	12.41	13.17
Iraq												
Basrah	35	10.97	10.97	10.86	10.48	10.48	11.45	11.45	11.45	11.46e	12.65e	12.65e
Kirkuk	36	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	11.60e	11.65	11.70e	12.89e	12.85e
Qatar												
Dukhan	40	11.67	11.67	11.55	11.17	11.17	11.85	11.85	11.85	11.85	13.19	13.19
Marine	36	11.29	11.29	11.17	10.80	10.80	11.66	11.66	11.66	11.66	13.00	13.00
Oman												
Oman	34	11.56	11.56	11.44	11.07	11.07	11.63	11.63	11.70	11.70e	12.74	13.00
						MEDITERRANEAN AND AFRICAN CRUDES						
Iraq												
Kirkuk	36	N.A.	N.A.	N.A.	N.A.	10.67	11.74e	11.95e	N.A.	N.A.	N.A.	13.50
Libya												
Brega	40	N.A.	N.A.	N.A.	N.A.	11.20	12.32	12.32	12.32	12.62	13.92	14.20
Nigeria												
Bonny	37	N.A.	N.A.	N.A.	N.A.	11.43	12.60	12.84	12.89	13.10	14.33	14.63
						OTHER CRUDES						
Indonesia												
Sumatra Light	35	10.80	10.80	12.60	12.60	12.60	12.80	12.80	12.80	12.80	13.55	13.55
Venezuela												
Tia Juana	26	N.A.	N.A.	N.A.	N.A.	11.62	11.39	11.12	11.22	11.65	12.72	12.71
Tia Juana	31	N.A.	N.A.	N.A.	N.A.	11.05	12.06	12.30	12.30	12.30	12.35	13.54
Oficina	35	N.A.	N.A.	N.A.	N.A.	11.49	12.54	12.80	12.80	12.80	13.99(2)	N.A.
Ecuador												
Oriente	30	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	11.60	11.60	13.00	13.00

e Estimates by PIW

N.A. Not available

(1) These are the governments' official prices applicable to sales to third parties and to crude sold back to companies still retaining and equity interest in Middle East oil producing ventures.

(2) Estimate by Petroleum Economist, October 1977

Source: Petroleum Intelligence Weekly

Section VI
Table 11a

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE & GRAVITY		1979			1980		1981		1982	1983	1985
		1 Jan.	1 Apr.	1 July	1 Jan.	1 June	19 Feb.	1 Nov.	1 Jan.	Mar.	Feb.
					PERSIAN / ARABIAN CRUDES						
Saudi Arabia											
Arab Light	34o	13.34	14.55	18.00	26.00	28.00	32.00	34.00	34.00	29.00	28.00
Arab Berri	39	14.08	16.47	21.32	27.52	29.52	33.52	35.60	35.40	29.50	28.11
Arab Medium	31	12.89	14.05	17.54	25.45	27.45	31.45	33.00	32.40	27.40	27.40
Arab Heavy	27	12.51	13.64	17.17	25.00	27.00	31.00	31.50	31.00	26.00	26.50
Iran											
Iran Light	34	13.45	16.57	22.00(e)	28.50	35.37	37.00	34.60	34.20	28.00	28.05
Iran Heavy	31	13.06	16.04	19.90(e)	27.77	34.37	36.00	33.40	32.30	27.30(e)	27.35
Kuwait											
Kuwait	31	12.83	15.80	19.49	25.50	29.50	35.50	33.00	32.30	27.30	27.30
Abu Dhabi											
Murban	39	14.10	17.10	21.56	27.56	31.56	36.56	35.70	35.50	29.56	28.15
Umm Shaif	37	13.78	16.88	21.36	27.36	31.36	36.36	35.50	35.30	29.36	28.05
Zakum	40	14.01	17.01	21.46	27.46	31.46	36.46	35.60	35.40	29.46	28.10
Iraq											
Basrah Light	35	13.29	15.70	19.96	25.96	29.96	35.96	34.67	32.65(e)	28.46(e)	
Kirkuk	36	13.52	15.95	21.25	26.18	30.18	37.50	35.11	34.93	29.83	
Qatar											
Dukhan	44	14.03	17.04	21.42	27.42	31.42	37.42	35.65	35.45	29.49	28.10
Marine	36	13.77	16.85	21.23	27.23	31.23	37.23	35.50	35.30	29.30	28.05
Oman											
Oman	36	13.65(e)	14.88(e)	N.A.	30.26	35.56	37.56	34.06	35.06	30.06	
					MEDITERRANEAN AND AFRICAN CRUDES						
Libya											
Brega	40	14.69	18.25	23.45	34.67	36.67	41.00	37.50	37.00	30.50	
Nigeria											
Bonny	37	14.80	18.50	23.49	29.99	36.71	40.02	36.52	36.52	30.00	28.67
						OTHER CRUDES					
Indonesia											
Sumatra Light	34	14.23(e)	15.51(e)	N.A.	27.50	31.50	35.00	35.00	35.00	29.53	28.53
Venezuela											
Tia Juana	26	13.36	15.76	19.31	25.20	29.28	32.88	32.88	32.88	27.88	27.60
Tia Juana	31	14.22	16.70	20.90	26.90	32.40	36.00	35.00	35.00	29.84	28.24
Oficina	34	14.69	17.21	22.45	28.75	34.25	38.06	37.06	37.06	31.09	28.80
Ecuador											
Oriente	30	13.18	20.60	N.A.	31.00	N.A.	39.30(e)	33.15	33.25	28.25	

N.A. Not Available.
(e) Estimate.
(1) These are the governments' official prices applicable to sales to third parties and to crude sold back to companies still retaining an equity interest in Middle East oil producing ventures. Some prices are retroactive to prior dates.

Source: Petroleum Intelligence Weekly

Section VI
Table 11b

OFFICIAL GOVERNMENT SELLING PRICES(1) OF KEY FOREIGN CRUDE OILS
(Dollars per Barrel)

CRUDE AND GRAVITY		1987 Feb.
Saudi Arabia		
Arab Light	34%	17.52
Arab Berri	39	17.87
Arab Medium	31	16.92
Arab Heavy	27	16.27
Iran		
Iran Light	34	17.50
Iran Heavy	31	16.89
Kuwait		
Kuwait	31	16.67
Abu Dhabi		
Murban	39	17.92
Umm Shaif	37	17.30
Zakum	40	17.82
Iraq		
Basrah Light	35	17.30
Kirkuk	36	17.60
Qatar		
Dukhan	44	17.82
Marine	36	17.67
Oman		
Oman	36	17.63
		MEDITERRANEAN AND AFRICAN CRUDES
Libya		
Brega	40	18.67
Nigeria		
Bonny	37	18.92
		OTHER CRUDES
Indonesia		
Sumatra Lgt.	34	17.56
Venezuela		
Tia Juana	26	16.72
Tia Juana	31	17.62
Oficina	34	N.A.
Ecuador		
Oriente	30	17.02

N.A. Not available

Source: Petroleum Intelligence Weekly

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Cents per Gallon)

	1920	1930	1940	1950	1960	1970	1971	1972	1973	1974	1975	1976	1977
Average U.S.	29.83	19.95	18.41	26.76	31.13	35.69	36.43	36.13	38.82	52.41	57.22	59.47	63.07
Alabama, Birmingham	30.04	20.50	21.71	29.33	31.23	35.23	35.62	36.79	38.57	51.67	53.15	58.25	64.00
Arizona, Phoenix	32.50	20.71	21.25	26.47	26.57	35.07	35.90	35.40	38.28	51.32	57.73	60.48	63.65
Arkansas, Little Rock	30.42	17.63	20.83	29.17	29.48	34.32	35.57	34.65	36.98	50.66	57.34	60.32	64.40
California, Los Angeles	-	-	-	-	29.57	34.15	35.32	34.47	38.04	52.28	57.88	60.49	64.23
California, San Francisco	24.17	20.00	17.88	25.12	32.23	35.82	35.82	35.30	39.07	53.30	59.46	61.49	65.15
Colorado, Denver	31.42	19.50	18.38	26.46	33.40	33.73	36.48	35.15	38.87	52.25	58.18	61.23	64.07
Connecticut, Hartford	33.00	19.13	14.48	23.63	29.32	36.98	37.82	37.65	40.98	54.63	57.57	59.99	63.83
District of Columbia	29.46	17.23	15.08	25.36	30.32	35.73	36.05	37.65	39.07	54.33	58.48	60.40	64.31
Florida, Miami(2)	29.25	21.50	19.33	28.03	31.40	35.07	34.65	35.98	38.15	51.31	54.98	57.15	58.82
Georgia, Atlanta	30.04	22.17	20.42	29.71	31.87	35.01	36.23	36.15	38.57	52.59	58.23	58.99	63.65
Idaho, Boise	33.63	26.41	24.18	30.65	37.42	35.07	34.[illegible]8	35.11	39.95	53.34	59.82	62.22	65.48
Illinois, Chicago	27.17	18.17	15.58	23.30	31.90	38.62	37.60	36.36	40.61	54.74	58.60	60.90	65.74
Indiana, Indianapolis	-	-	-	-	30.73	37.23	37.57	35.56	39.26	53.17	59.08	59.70	62.74
Iowa, Des Moines	27.42	18.33	16.78	25.08	31.57	35.32	36.32	37.23	38.45	51.17	57.32	60.33	64.79
Kansas, Wichita	26.80	15.30	14.99	24.70	29.15	32.98	32.98	32.40	37.78	51.17	57.32	61.33	63.49
Kentucky, Louisville	-	-	-	-	32.80	36.65	37.48	37.28	40.31	53.83	58.20	61.25	64.90
Louisiana, New Orleans	27.75	15.17	20.66	30.17	29.07	35.73	35.57	34.06	36.48	49.74	56.09	60.40	63.74
Maryland, Baltimore	29.58	18.77	17.88	25.74	31.65	35.65	36.07	37.65	39.23	51.21	56.70	58.48	62.46
Massachusetts, Boston	32.63	17.96	14.19	24.18	26.98	35.73	36.57	35.98	39.07	52.40	55.98	58.23	61.16
Michigan, Detroit	28.12	18.28	15.53	25.17	30.93	33.82	34.35	34.23	39.53	53.86	59.42	57.65	62.07
Mississippi, Jackson	-	-	-	-	32.23	35.48	37.52	34.91	38.48	52.09	54.17	57.15	62.29
Missouri, St. Louis	27.58	17.07	16.43	23.04	27.15	34.07	36.15	35.65	39.20	52.17	57.65	59.48	63.40
Montana, Great Falls	-	-	-	-	36.90	36.36	36.57	35.23	39.95	53.17	59.42	60.85	65.44
Nebraska, Omaha	27.25	20.08	17.97	26.75	32.53	37.82	37.40	37.48	40.03	53.17	59.40	63.15	66.15
New Hampshire, Manchester	32.04	21.12	16.02	24.97	30.07	36.40	38.23	37.65	40.07	54.48	56.48	59.40	62.98
New Jersey, Newark	29.88	17.12	15.78	23.18	28.32	37.40	38.07	36.32	38.57	52.30	54.73	55.65	59.40
New Mexico, Albuquerque	32.25	21.00	19.92	30.25	32.90	36.73	36.90	36.48	38.29	52.65	58.98	59.53	63.59
New York, Buffalo	30.92	18.07	16.30	26.15	27.92	36.11	36.28	37.15	40.07	55.38	58.65	61.37	64.61
New York, New York	31.92	17.36	16.11	26.50	31.40	36.93	39.18	44.56	43.73	59.75	61.15	61.81	64.31
North Carolina, Charlotte	31.33	20.94	20.32	29.37	31.03	35.32	37.36	37.31	39.32	51.99	56.76	60.42	61.95
Ohio, Cincinnati	-	-	-	-	31.40	36.65	37.90	37.90	38.65	53.36	57.19	57.23	60.65
Ohio, Cleveland	-	-	-	-	32.32	36.65	37.90	37.80	38.65	53.36	57.19	57.23	60.40
Oklahoma, Tulsa	27.75	19.25	14.58	26.75	30.48	35.07	35.07	34.73	37.53	50.33	56.44	59.46	63.74
Oregon, Portland	26.79	20.96	20.38	27.98	33.65	35.32	35.82	35.48	38.39	51.70	55.50	57.23	61.49
Pennsylvania, Philadelphia	32.00	20.58	15.49	25.19	28.48	36.48	37.23	36.74	37.90	52.88	53.90	56.73	61.40
Rhode Island, Providence	32.63	17.48	14.66	24.08	27.06	36.23	36.90	36.15	38.32	52.57	55.90	58.57	62.15
South Carolina, Charleston	29.17	20.86	20.10	28.07	30.94	34.32	35.73	36.65	38.40	52.88	54.39	57.90	61.23
Tennessee, Memphis	29.00	19.04	22.22	28.22	29.65	35.57	35.48	35.48	37.48	50.51	57.17	59.65	64.07
Texas, Dallas	-	-	-	-	29.23	32.73	33.90	33.15	34.37	47.17	53.53	56.40	59.90
Texas, El Paso	-	-	-	-	28.88	34.73	36.90	35.90	36.29	47.98	55.95	57.40	60.65
Texas, Houston	29.13	18.83	17.17	24.00	29.32	32.23	32.82	32.34	33.90	47.28	52.40	56.40	60.15
Utah, Salt Lake City	31.88	22.67	19.88	24.42	30.90	34.32	34.98	35.56	37.37	50.17	56.32	58.45	60.94
Virginia, Norfolk	30.08	19.86	20.38	27.33	31.23	35.57	35.23	36.90	39.48	52.73	56.23	60.07	63.98
Washington, Seattle	-	-	-	-	29.57	36.40	36.73	36.35	39.42	52.22	57.18	59.98	64.23
Washington, Spokane	28.92	23.83	21.92	30.63	36.73	36.40	36.57	35.95	39.07	52.72	56.68	60.13	63.87
West Virginia, Charleston	30.33	20.46	20.68	29.23	31.32	35.73	37.73	38.40	39.56	51.23	57.57	59.07	63.14
Wisconsin, Milwaukee	27.35	17.43	19.15	24.90	30.98	33.15	34.48	33.73	38.37	52.13	58.15	58.40	61.40

(1) Regular grade gasoline at full service stations, retail price including tax.
(2) Prices prior to 1970 are for Jacksonville.
Source: Data for 1920-1950, Texaco Inc.; 1960-1977, Platt's Oilgram Price Service
Note: The list of selected cities has been changed.

Section VI
Table 12a

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Dollars per Gallon)

	1978		1979		1980		1981		1982		1983	
Area(2)	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded
U.S. City Average	.627	.670	.857	.903	1.191	1.245	1.311	1.378	1.222	1.296	1.157	1.241
Anchorage, Alaska	.744	.767	.921	.952	1.241	1.275	1.408	1.465	1.380	1.446	1.253	1.339
Atlanta, Ga.	.624	.668	.843	.890	1.197	1.251	1.328	1.397	1.234	1.319	1.143	1.248
Baltimore Md.	.613	.666	.844	.891	1.204	1.251	1.334	1.389	1.288	1.335	1.244	1.296
Boston, Ma.	.623	.660	.857	.899	1.199	1.241	1.337	1.391	1.234	1.283	1.155	1.225
Buffalo, NY.	.644	.687	.899	.948	1.235	1.280	1.336	1.394	1.248	1.306	1.222	1.288
Chicago Ill-NW Ind.	.680	.730	.925	.979	1.246	1.304	1.344	1.410	1.264	1.321	1.223	1.298
Cincinnati, Oh-Ky-Ind.	.618	.655	.842	.882	1.154	1.206	1.275	1.345	1.217	1.293	1.187	1.257
Cleveland, Oh	.621	.665	.839	.884	1.160	1.203	1.304	1.385	1.269	1.327	1.175	1.248
Dallas-Ft Worth, Tx	.579	.617	.789	.833	1.132	1.186	1.245	1.307	1.140	1.209	1.081	1.158
Denver-Boulder, Colo.	.612	.663	.838	.886	1.150	1.217	1.259	1.330	1.197	1.273	1.091	1.197
Detroit, Mich.	.643	.696	.891	.947	1.242	1.303	1.335	1.395	1.247	1.304	1.227	1.280
Honolulu, Hawaii	.759	.764	.937	.976	1.298	1.355	1.409	1.567	1.472	1.542	1.400	1.462
Houston, Tx	.567	.613	.794	.835	1.139	1.183	1.261	1.313	1.143	1.212	1.040	1.132
Kansas City, Mo-Kn	.604	.644	.843	.886	1.137	1.190	1.237	1.298	1.195	1.262	1.155	1.226
Los Angeles, Long Beach, Anaheim, Ca.	.644	.691	.892	.943	1.213	1.271	1.337	1.409	1.232	1.318	1.166	1.215
Miami, Fla	.611	.661	.841	.892	1.186	1.235	1.319	1.389	1.257	1.364	1.207	1.326
Milwaukee, Wisc	.595	.631	.819	.864	1.139	1.198	1.273	1.329	1.245	1.286	1.190	1.224
Minneapolis, St. Paul, Minn-Wisc.	.618	.654	.860	.901	1.175	1.231	1.294	1.360	1.253	1.328	1.211	1.284
New York, NY-NE N.J.	.632	.675	.882	.927	1.241	1.286	1.355	1.413	1.249	1.319	1.181	1.257
NE Penn	.610	.650	.837	.879	1.178	1.218	1.306	1.353	1.197	1.242	1.157	1.208
Philadelphia,Pa-NJ.	.618	.658	.855	.904	1.192	1.233	1.309	1.365	1.188	1.255	1.149	1.210
Pittsburgh, Pa.	.628	.663	.857	.893	1.205	1.242	1.356	1.409	1.234	1.312	1.147	1.233
Portland, Ore-Wash	.636	.681	.870	.907	1.193	1.226	1.317	1.381	1.257	1.337	1.121	1.230
St. Louis, Mo-Ill.	.607	.656	.851	.897	1.145	1.208	1.230	1.299	1.151	1.213	1.111	1.164
San Diego, Ca.	.636	.691	.881	.932	1.215	1.280	1.323	1.408	1.240	1.339	1.157	1.253
San Fran-Oakland, Ca.	.661	.717	.899	.961	1.243	1.310	1.355	1.436	1.260	1.353	1.154	1.290
Seattle-Everett, Wash.	.650	.677	.877	.917	1.211	1.253	1.335	1.401	1.227	1.271	1.145	1.182
Washington, DC-Md-Va.	.651	.702	.853	.906	1.224	1.276	1.334	1.393	1.256	1.304	1.232	1.288
Region (3)												
Northeast	.631	.672	.870	.913	1.220	1.260	1.344	1.396	1.238	1.298	1.181	1.248
North Central	.628	.671	.861	.910	1.183	1.244	1.303	1.370	1.233	1.298	1.191	1.261
South	.611	.654	.831	.863	1.172	1.223	1.293	1.360	1.196	1.272	1.132	1.217
West	.643	.695	.879	.936	1.201	1.267	1.323	1.405	1.233	1.325	1.132	1.238

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(1) Regular grade gasoline - leaded and unleaded
(2) Area is generally the SMSA. Los Angeles, Long Beach, Anaheim is a combination of two SMSA's and N.Y.-NE N.J. and Chicago-NW Ind. are the more extensive Standard Consolidated Areas.
(3) Regions are defined as the four Census regions.

SOURCE: U.S. Bureau of Labor Statistics

AVERAGE U.S. RETAIL GASOLINE PRICES(1) FOR SELECTED CITIES
(Dollars per Gallon)

	1984		1985		1986		1987	
Area(2)	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded	Leaded	Unleaded
U.S. City Average	1.129	1.212	1.115	1.203	0.857	0.927	0.897	0.948
Anchorage, Alaska	1.204	1.294	1.180	1.237	0.950	0.997	NA	NA
Atlanta, Ga.	1.110	1.225	1.094	1.197	0.769	0.888	NA	NA
Baltimore, Md.	1.092	1.164	1.092	1.163	0.877	0.921	0.913	0.935
Boston, Ma.	1.078	1.175	1.082	1.173	0.857	0.922	0.883	0.929
Buffalo, N.Y.	1.174	1.249	1.145	1.208	0.861	0.890	NA	NA
Chicago, Ill-NW Ind.	1.206	1.284	1.176	1.258	0.912	0.953	0.969	1.004
Cincinnati, Oh-Ky-Ind.	1.153	1.218	1.090	1.149	0.812	0.853	NA	NA
Cleveland, Oh.	1.130	1.214	1.081	1.182	0.820	0.902	0.880	0.941
Dallas-Ft. Worth, Tx.	1.072	1.163	1.104	1.142	0.789	0.831	0.856	0.881
Denver-Boulder, Co.	1.049	1.164	1.056	1.155	0.788	0.873	NA	NA
Detroit, Mi.	1.236	1.278	1.173	1.264	0.835	0.944	0.859	0.972
Honolulu, Ha.	1.368	1.443	1.274	1.396	1.077	1.221	NA	NA
Houston, Tx.	1.015	1.116	1.023	1.092	0.753	0.796	0.852	0.880
Kansas City, Mo-Kn.	1.082	1.142	1.048	1.124	0.758	0.817	NA	NA
Los Angeles, Long Beach, Anaheim, Ca.	1.102	1.211	1.088	1.191	0.879	0.956	0.901	0.931
Miami, Fl.	1.126	1.215	1.115	1.205	0.895	0.953	0.949	0.983
Milwaukee, Wi.	1.147	1.202	1.129	1.197	0.857	0.899	NA	NA
Minneapolis, St. Paul, Mn-Wi.	1.171	1.223	1.174	1.247	0.902	0.965	NA	NA
New York, NY-NE N.J.	1.116	1.189	1.114	1.185	0.859	0.908	0.903	0.936
NE Pa.	1.137	1.204	1.142	1.227	0.869	0.910	NA	NA
Philadelphia, Pa-N.J.	1.141	1.213	1.113	1.164	0.869	0.880	0.891	0.895
Pittsburgh, Pa.	1.147	1.238	1.149	1.213	0.855	0.883	0.887	0.899
Portland, Or-Wa.	1.116	1.222	1.115	1.200	0.839	0.922	NA	NA
St. Louis, Mo-Ill.	1.086	1.142	1.064	1.137	0.797	0.865	0.854	0.897
San Diego, Ca.	1.162	1.212	1.119	1.248	0.876	1.004	NA	NA
San Fran-Oakland, Ca.	1.156	1.302	1.141	1.252	0.869	0.976	0.870	0.955
Seattle-Everett, Wa.	1.178	1.217	1.152	1.221	0.891	0.962	NA	NA
Washington, D.C.-Md-Va.	1.203	1.302	1.148	1.254	0.890	0.983	0.911	0.998
Region(3)								
Northeast	1.133	1.204	1.124	1.201	0.877	0.931	0.900	0.946
North Central	1.157	1.233	1.133	1.219	0.859	0.921	0.914	0.958
South	1.105	1.192	1.101	1.181	0.831	0.904	0.883	0.943
West	1.123	1.220	1.115	1.209	0.873	0.957	0.896	0.946

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(1) Regular grade gasoline--leaded and unleaded.
(2) Area is generally the SMSA. Los Angeles, Long Beach, Anaheim is a combination of two SMSA's and N.Y.-NE N.J. and Chicago-NW Ind. are the more extensive Standard Consolidated Areas.
(3) Regions are defined as the four Census Regions.

Source: U.S. Bureau of Labor Statistics

AVERAGE PRICE OF NATURAL GAS CONSUMED BY END USE SECTOR
(Dollars per Thousand Cubic Feet)

Year	Lease and Plant Fuel	Pipeline Fuel	Delivered to Consumers					Total Consumption
			Residential	Commercial(1)	Industrial	Electric Utilities	Total	
1967	0.15	0.20	1.04	0.74	0.34	0.28	0.57	0.53
1968	0.16	0.20	1.04	0.73	0.34	0.22	0.55	0.51
1969	0.16	0.21	1.05	0.74	0.35	0.27	0.57	0.53
1970	0.18	0.21	1.09	0.77	0.37	0.29	0.59	0.55
1971	0.19	0.22	1.15	0.82	0.41	0.32	0.63	0.59
1972	0.20	0.23	1.21	0.88	0.45	0.34	0.68	0.63
1973	0.21	0.25	1.29	0.94	0.50	0.38	0.73	0.68
1974	0.51	0.30	1.43	1.07	0.67	0.51	0.89	0.84
1975	0.47	0.40	1.71	1.35	0.96	0.77	1.19	1.12
1976	0.57	0.51	1.98	1.64	1.24	1.06	1.47	1.38
1977	0.71	0.77	2.35	2.04	1.50	1.32	1.78	1.66
1978	0.79	0.90	2.56	2.23	1.70	1.48	1.98	1.85
1979	1.06	1.32	2.98	2.73	1.99	1.81	2.34	2.21
1980	1.43	1.85	3.68	3.39	2.56	2.27	2.91	2.80
1981	1.93	2.39	4.29	4.00	3.14	2.89	3.51	3.39
1982	2.23	2.97	5.17	4.82	3.87	3.48	4.32	4.15
1983	2.54	3.15	6.06	5.59	4.18	3.58	4.82	4.64
1984	2.71	3.04	6.12	5.55	4.22	3.70	4.85	4.67
1985	2.37	2.92	6.12	5.50	3.95	3.55	4.72	4.54
1986	2.02	2.52	5.83	5.08	3.23	2.43	4.13	3.96
1987	NA	2.17	5.54	4.78	2.94	2.32	4.05	2.96

NA Not available.
(1) Includes deliveries to local, state and federal agencies engaged in non-manufacturing activities.

Source: U. S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

Section VI
Table 14

SPOT PRICES FOR SELECTED WORLD CRUDE OILS
(Mid-month--Dollars per Barrel)

Crude/Type	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1984												
Brent(1)	29.30	29.33	29.85	30.05	29.90	29.28	28.38	28.43	28.48	28.30	27.95	26.95
Dubai(2)	27.75	27.60	27.85	28.03	28.08	28.05	27.50	27.18	27.35	27.33	27.20	26.53
Forcados(3)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	28.35	28.50	28.50	29.05	28.00	27.40
ANS(4)	28.35	28.50	29.68	29.53	29.30	29.38	28.48	28.70	28.70	28.13	27.95	26.33
WTI(5)	29.73	29.73	30.73	30.73	30.55	30.08	28.83	29.23	29.28	28.83	28.33	26.35
1985												
Brent	27.05	28.30	27.75	28.00	26.40	26.25	26.30	27.10	27.20	28.15	29.60	25.85
Dubai	27.45	27.25	27.13	26.75	25.53	25.45	25.53	26.25	26.08	26.80	26.85	26.55
Forcados	27.35	28.55	28.25	28.15	26.80	26.45	26.43	27.35	27.95	28.85	30.15	26.85
ANS	25.95	28.28	28.35	28.50	26.90	25.85	26.03	27.08	27.18	27.43	29.05	25.58
WTI	25.95	27.78	28.33	29.13	27.83	27.33	27.33	28.03	27.93	29.33	30.98	27.23
1986												
Brent	23.25	17.00	13.30	12.55	14.25	12.10	9.30	14.70	14.55	13.50	15.15	15.75
Dubai	23.70	14.65	11.30	10.68	11.48	10.40	7.15	12.95	14.30	13.15	14.05	14.35
Forcados	25.85	17.35	14.10	13.35	14.68	12.00	9.05	14.45	14.30	13.10	14.50	15.80
ANS	23.95	15.15	12.73	11.85	13.93	12.05	10.30	13.98	13.53	12.93	14.43	15.23
WTI	25.18	16.03	12.73	12.68	15.68	13.68	12.05	15.83	15.08	14.38	15.68	16.13
1987												
Brent	18.83	17.40	17.88	17.58	18.80	18.75	19.80	19.20	18.30	18.75	17.95	16.95
Dubai	17.40	16.77	16.87	16.98	17.00	17.25	17.60	17.25	16.90	16.95	16.45	15.10
Forcados	18.85	17.75	17.98	17.53	18.65	18.75	19.80	19.15	18.35	18.90	18.05	16.15
ANS	18.60	17.05	17.75	17.38	18.75	18.85	20.05	19.15	18.30	18.55	17.40	14.65
WTI	19.13	17.83	18.38	17.98	19.55	19.85	21.55	20.55	19.60	19.75	18.90	16.65
1988												
Brent	16.55	15.90	14.25	16.90	16.55	15.60	14.35	14.95	13.70	13.35	13.00	15.15
Dubai	15.25	15.10	12.90	15.00	15.00	13.75	12.45	13.05	11.90	11.15	10.35	12.80
Forcados	16.70	15.90	14.25	16.85	16.50	15.55	14.25	14.90	13.40	13.45	13.05	15.75
ANS	15.25	14.95	13.90	16.20	15.55	14.80	13.80	14.25	13.45	12.85	11.75	14.50
WTI	16.90	16.75	15.65	18.25	17.50	16.55	14.85	15.55	14.90	14.90	14.20	16.35
1989												
Brent	17.10	15.85	18.50	19.30	18.30	16.50						
Dubai	14.40	14.15	16.20	17.00	15.45	14.70						
Forcados	17.85	16.50	19.15	19.95	19.10	16.30						
ANS	16.95	15.95	17.75	19.55	17.40	17.40						
WTI	18.85	17.40	19.75	20.65	20.05	20.70						

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(1) Brent is from the North Sea, United Kingdom.
(2) Dubai from Dubai, part of United Arab Emirates.
(3) Forcados from Nigeria.
(4) ANS (Alaskan North Slope) from the United States.
(5) WTI (West Texas Intermediate) from the United States.

Source: Platt's Oilgram Price Report.

Section VI
Table 15

HISTORICAL AVERAGE U.S. GASOLINE PRICES: 1918-1946
(Cents per Gallon)

Year	Secvice Station Price (Excluding Tax)	State and Federal Taxes	Service Station Price (Including Tax)
1918	25.12	--	25.12
1919	25.41	0.06	25.47
1920	29.74	0.09	29.83
1921	26.11	0.20	26.31
1922	24.82	0.38	25.20
1923	21.06	0.91	21.97
1924	19.47	1.48	20.95
1925	20.09	2.11	22.20
1926	20.97	2.41	23.38
1927	18.28	2.81	21.09
1928	17.90	3.04	20.94
1929	17.92	3.50	21.42
1930	16.16	3.79	19.95
1931	12.98	4.00	16.98
1932	13.30	4.63	17.93
1933	12.41	5.41	17.82
1934	13.64	5.21	18.85
1935	13.55	5.29	18.84
1936	14.10	5.35	19.45
1937	14.59	5.40	19.99
1938	14.07	5.44	19.51
1939	13.31	5.44	18.75
1940	12.75	5.66	18.41
1941	13.30	5.93	19.23
1942	14.46	5.97	20.43
1943	14.56	5.97	20.53
1944	14.62	5.97	20.59
1945	14.48	6.02	20.50
1946	14.69	6.08	20.77

Source: Texaco, Inc.

BASIC PETROLEUM DATA BOOK

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ESTIMATED WORLD DEMAND FOR REFINED PETROLEUM PRODUCTS BY AREA
(Thousands of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist(1) Nations	Total World
1950	2,392,974	118,383	262,544	2,773,901	34,683	62,244	136,628	382,750	3,390,206	N.A.	N.A.
1951	2,578,766	133,884	298,099	3,010,749	44,053	75,137	164,829	460,604	3,755,372	N.A.	N.A.
1952	2,668,134	149,244	318,351	3,135,729	51,575	71,424	184,416	504,968	3,948,112	N.A.	N.A.
1953	2,776,778	163,237	328,243	3,268,258	57,147	75,196	204,607	550,652	4,155,858	N.A.	N.A.
1954	2,833,896	180,887	355,648	3,370,431	61,114	93,833	231,493	644,159	4,401,030	N.A.	N.A.
1955	3,089,348	200,142	353,450	3,642,940	67,243	97,860	261,296	715,283	4,784,622	N.A.	N.A.
1956	3,214,651	230,435	394,541	3,839,627	67,785	105,475	386,546	836,671	5,136,104	N.A.	N.A.
1957	3,221,949	232,667	429,009	3,883,625	75,325	116,640	331,923	841,901	5,249,414	N.A.	N.A.
1958	3,327,993	241,692	487,366	4,057,051	140,515	111,666	354,485	983,139	5,646,856	N.A.	N.A.
1959	3,477,173	295,633	553,903	4,326,709	178,303	121,883	440,003	1,203,651	6,270,549	958,548	7,229,097
1960	3,585,820	306,865	581,292	4,473,977	209,473	129,494	540,687	1,407,121	6,760,752	1,058,000	7,818,752
1961	3,641,280	315,565	633,170	4,590,015	219,092	152,970	632,167	1,625,344	7,219,588	1,205,194	8,424,782
1962	3,796,029	334,661	684,935	4,815,625	241,572	157,354	716,991	1,871,923	7,803,465	1,294,308	9,097,773
1963	3,921,364	359,651	703,155	4,984,170	253,430	175,683	857,292	2,150,829	8,421,404	1,413,898	9,835,302
1964	4,034,236	383,080	742,025	5,159,341	272,513	205,091	974,790	2,449,413	9,061,148	1,512,555	10,573,703
1965	4,202,039	416,873	766,617	5,385,529	285,132	205,891	1,114,940	2,746,529	9,738,021	1,647,203	11,385,224
1966	4,410,796	439,664	823,887	5,674,347	299,697	212,655	1,247,989	3,051,357	10,486,045	1,765,111	12,251,156
1967	4,584,526	456,663	857,000	5,898,189	318,350	219,667	1,367,445	3,262,152	11,065,803	1,927,179	12,992,982
1968	4,901,789	491,813	890,839	6,284,441	341,735	258,103	1,662,915	3,644,518	12,191,712	2,060,613	14,252,325
1969	5,159,930	508,609	943,096	6,611,635	361,131	246,304	1,987,104	4,153,039	13,359,213	2,228,375	15,587,588
1970	5,364,473	542,386	978,422	6,885,281	390,398	260,538	2,258,789	4,512,974	14,307,980	2,373,670	16,681,650
1971	5,552,560	559,038	1,047,630	7,159,228	459,608	293,014	2,451,760	4,712,845	15,076,455	3,622,268	17,698,723
1972	5,990,316	591,306	1,124,200	7,705,822	467,016	319,841	2,576,352	5,068,198	16,137,229	2,607,564	18,744,793
1973	6,317,303	622,922	1,227,749	8,167,974	561,726	345,574	2,887,617	5,289,543	17,252,434	3,173,318	20,425,752
1974	6,078,239	635,142	1,276,790	7,990,171	586,216	337,707	2,848,143	4,993,599	16,755,836	3,034,212	19,790,048

N.A. Not Available
(1) Excludes Cuba

Source: 1950-1958, U.S. Bureau of Mines, World Petroleum Statistics Annual
1959-1974, U.S. Bureau of Mines, International Petroleum Annual

Section VII
Table 1a

ESTIMATED WORLD DEMAND FOR REFINED PETROLEUM PRODUCTS BY AREA
(Thousands of Barrels)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia	Western Europe	Total Free World	Communist(1) Nations	Total World
1975	5,957,515	618,363	1,294,353	7,870,231	586,502	374,996	2,679,861	4,599,943	16,111,533	3,231,831	19,343,365
1976	6,390,750	638,081	1,375,019	8,403,850	619,677	393,495	2,920,933	4,922,309	17,260,264	3,915,572	21,175,836
1977	6,727,468	639,167	1,426,596	8,793,231	679,657	404,914	3,104,274	5,035,011	18,017,087	4,225,188	22,242,275
1978	6,879,017	633,868	1,517,532	9,030,417	718,118	470,978	3,226,772	5,142,458	18,588,743	4,375,505	22,964,248
1979	6,757,077	677,805	1,606,730	9,041,612	647,510	512,460	4,146,765	5,488,505	19,836,852	3,928,130	23,764,982
1980	6,242,445	712,602	1,823,046	8,778,093	777,450	533,262	3,269,112	5,060,316	18,418,233	4,715,544	23,133,777
1981	5,861,058	642,400	1,622,425	8,125,883	739,320	556,625	3,164,550	4,677,475	17,263,853	4,867,275	22,131,128
1982	5,582,938	571,225	1,702,725	7,856,888	799,350	587,650	3,038,625	4,449,350	16,731,863	4,883,700	21,615,563
1983	5,559,364	538,375	1,624,250	7,721,989	885,125	594,950	3,036,800	4,358,100	16,596,964	4,827,125	21,424,089
1984	5,755,575	521,550	1,617,720	7,894,845	931,470	596,580	3,131,130	4,410,300	16,964,325	4,772,640	21,736,965
1985	5,740,143	543,850	1,615,125	7,899,118	978,200	620,500	3,078,775	4,330,725	16,907,318	4,781,500	21,688,818
1986	5,942,429	538,375	1,653,450	8,134,254	970,900	618,675	3,188,275	4,504,100	16,797,529	4,858,150	21,655,679
1987	6,082,742	562,100	1,730,100	8,374,942	987,325	647,875	3,274,050	4,505,925	17,790,117	4,883,700	22,673,817
1988	6,325,692	591,090	1,765,950	8,682,732	1,030,290	656,970	3,573,990	4,567,680	18,511,662	4,933,680	23,445,342

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(1) Excludes Cuba.

Source: 1975-1979: U.S. Department of Energy, Energy Information Administration, International Energy Annual
1981-1988: U.S. Energy Information Administration, United States; Rest of World, BP Statistical Review of the World Oil Industry

Section VII
Table 2

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

	PRODUCTION													
Year	Crude Oil	Lease Condensate	NGL's	Total Imports	Other Refinery Input(1)	Total New Supply	Unaccounted for Crude Oil(2)	Process. Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products
1947	5,087	(4)	362	437	2	5,888	+93	12	5,993	- 14	6,007	69	451	5,487
1948	5,520	(4)	401	514	1	6,436	+84	8	6,528	+293	6,235	84	368	5,783
1949	5,046	(4)	430	645	1	6,123	+42	2	6,167	- 8	6,175	42	327	5,806
1950	5,407	(4)	499	850	-	6,756	+98	2	6,856	- 56	6,912	51	305	6,556
1951	6,158	(4)	561	844	1	7,564	+49	7	7,620	+101	7,519	32	422	7,065
1952	6,256	(4)	611	952	1	7,820	+20	7	7,847	+108	7,739	17	432	7,290
1953	6,458	(4)	654	1,034	1	8,147	+ 9	20	8,176	+142	8,034	24	402	7,608
1954	6,342	(4)	691	1,052	1	8,086	+ 7	23	8,117	- 29	8,146	27	355	7,764
1955	6,807	(4)	771	1,248	1	8,827	+ 9	34	8,870	--	8,870	38	368	8,464
1956	7,151	(4)	800	1,436	1	9,388	+ 8	43	9,439	+179	9,260	47	430	8,783
1957	7,170	(4)	808	1,574	1	9,553	+18	42	9,613	+167	9,446	51	568	8,827
1958	6,710	(4)	808	1,700	1	9,218	N.A.	64	9,282	-140	9,422	29	276	9,117
1959	7,054	(4)	879	1,780	1	9,713	N.A.	86	9,799	+ 51	9,748	11	211	9,526
1960	7,035	(4)	929	1,815	1	9,780	N.A.	146	9,926	- 83	10,009	9	202	9,797
1961	7,183	(4)	991	1,917	-	10,091	N.A.	179	10,270	+111	10,159	9	174	9,976
1962	7,332	(4)	1,021	2,082	-	10,435	N.A.	175	10,610	+ 32	10,578	9	168	10,400
1963	7,542	(4)	1,098	2,123	-	10,763	N.A.	202	10,965	+ 3	10,962	10	208	10,743
1964	7,614	(4)	1,154	2,259	-	11,027	N.A.	219	11,246	+ 10	11,236	10	202	11,023
1965	7,804	(4)	1,210	2,468	-	11,482	N.A.	220	11,702	- 8	11,710	10	187	11,512
1966	8,295	(4)	1,284	2,573	-	12,152	N.A.	245	12,397	+104	12,293	10	198	12,084
1967	8,810	(4)	1,409	2,537	-	12,757	N.A.	292	13,049	+173	12,876	9	307	12,560
1968	8,660	436	1,504	2,840	9	13,448	+20	319	13,787	+152	13,635	11	231	13,393
1969	8,778	460	1,590	3,166	12	14,005	- 7	335	14,333	- 48	14,381	12	233	14,137
1970	9,180	457	1,660	3,419	17	14,733	-21	359	15,071	+103	14,968	12	259	14,697
1971	9,032	431	1,693	3,926	17	15,098	+41	382	15,521	+ 71	15,449	12	224	15,213
1972	8,998	443	1,744	4,741	28	15,954	+28	388	16,370	-232	16,602	13	222	16,367
1973	8,784	424	1,738	6,256	30	17,232	+ 3	453	17,688	+135	17,552	13	231	17,308
1974	8,375	399	1,688	6,112	36	16,610	-25	480	17,065	+179	16,886	13	221	16,653

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(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968, prior years include adjustments where available.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Separate data not available prior to 1968.
(5) Data for this year and those for subsequent years are on a 50-state basis.

Source: U.S. Bureau of Mines, Annual Petroleum Statements.

Section VII
Table 2a

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

	PRODUCTION													
Year	Crude Oil	Lease Con- densate	NGL's	Total Imports	Other Refinery Input(1)	Total New Supply	Un- accounted for Crude Oil(2)	Process. Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products
1975	8,007	367	1,633	6,056	38	16,101	+17	460	16,578	+ 32	16,545	13	209	16,322
1976	7,776	355	1,608	7,313	38	17,086	+77	479	17,646	- 58	17,698	14	223	17,461
1977	7,875	370	1,618	8,787	50	18,700	- 6	524	19,218	+529	18,689	16	243	18,431(4)
1978	8,353	355	1,567	8,202	53	18,530	-57	496	18,969	-257	19,226	30	362	18,847(4)
1979	8,181	371	1,583	8,393	44	18,572	-11	527	19,088	+107	18,981	29	471	18,516(4)
1980	8,210	386	1,573	6,865	44	17,078	+34	597	17,709	+ 94	17,615	28	544	17,056(4)
1981	8,177	395	1,626	5,996	50	15,971	+83	508	16,540	-176	16,716	63	595	16,058(4)
1982	8,262	387	1,550	4,948	53	15,200	+71	531	15,660	-327	16,173	62	815	15,296
1983	8,688	(6)	1,559	4,817	53	15,117	+114	488	15,719	-169	15,972	2	739	15,231
1984	8,879	(6)	1,630	5,240	45	15,794	+185	553	16,532	+ 85	16,447	2	722	15,726
1985	8,971	(6)	1,609	4,949	55	15,584	+145	557	16,286	-220	16,506	1	781	15,726
Jan.	8,740	(6)	1,628	4,192							16,902	1	792	16,109
Feb.	9,025	(6)	1,623	3,815							16,979	1	857	16,121
Mar.	9,095	(6)	1,600	4,625							16,068	1	694	15,373
Apr.	9,043	(6)	1,582	5,208							16,237	1	764	15,472
May	9,132	(6)	1,594	5,554							16,210	1	705	15,504
Jun.	9,022	(6)	1,597	4,774							16,176	1	692	15,483
Jul.	8,949	(6)	1,568	4,724							16,110	1	675	15,434
Aug.	8,803	(6)	1,594	4,602							16,809	0	749	16,060
Sep.	8,954	(6)	1,575	4,899							15,905	0	806	15,099
Oct.	8,970	(6)	1,610	5,101							16,634	0	690	15,944
Nov.	8,902	(6)	1,660	6,063							16,539	0	1,036	15,503
Dec.	9,030	(6)	1,680	5,757							17,537	1	925	16,611
1986	8,680	(6)	1,551	6,176	58	16,465	+139	616	17,220	+152	17,068	0	785	16,283
Jan.	9,137	(6)	1,711	5,522							16,948	1	859	16,088
Feb.	9,173	(6)	1,696	4,652							17,062	0	876	16,186
Mar.	9,013	(6)	1,604	4,653							17,008	0	732	16,276
Apr.	8,864	(6)	1,523	5,376							16,795	0	850	15,945
May	8,838	(6)	1,543	6,364							16,717	0	724	15,993
Jun.	8,623	(6)	1,504	6,784							16,691	0	642	16,049
Jul.	8,660	(6)	1,507	6,890							16,992	0	685	16,307
Aug.	8,374	(6)	1,445	7,117							17,486	0	868	16,618
Sep.	8,328	(6)	1,468	7,043							16,623	0	714	15,909
Oct.	8,419	(6)	1,477	6,390							17,433	0	831	16,602
Nov.	8,412	(6)	1,569	6,547							17,042	0	821	16,221
Dec.	8,352	(6)	1,571	6,652							17,951	0	820	17,131

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(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968, prior years include adjustments where available.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Figures do not add due to independent rounding.
(5) Excludes oil imported to the strategic petroleum reserve.
(6) Included with crude oil. Separate figure is not available.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 2b

TOTAL U.S. SUPPLY AND DEMAND FOR ALL OILS
(Thousands of barrels per day)

Year	PRODUCTION Crude Oil	PRODUCTION NGL's	Total Imports(5)	Other Refinery Input(1)	Total New Supply	Un-accounted for Crude Oil(2)	Processing Gain or Loss(3)	Total Supply	Change in Stocks	Total Disposition of Primary Supply	Crude Oil Losses	Exports	Domestic Demand for Refined Products(4)
1987	8,349	1,595	6,605	64	16,613	145	639	17,397	-32	17,429	0	764	16,665
Jan.	8,480	1,582	6,261							17,388	1	703	16,684
Feb.	8,389	1,618	5,940							17,885	0	977	16,908
Mar.	8,464	1,598	5,699							16,886	1	720	16,165
Apr.	8,498	1,590	5,854							17,394	0	870	16,524
May	8,336	1,585	5,981							16,692	0	666	16,026
Jun.	8,279	1,578	6,705							17,499	0	669	16,830
Jul.	8,251	1,582	7,512							17,793	0	680	17,113
Aug.	8,210	1,571	7,391							17,010	0	664	16,346
Sep.	8,205	1,582	7,114							17,465	0	795	16,670
Oct.	8,364	1,602	7,011							17,587	0	646	16,941
Nov.	8,397	1,637	6,971							17,080	0	737	16,343
Dec.	8,318	1,621	6,765							18,502	0	1,057	17,445
1988	8,140	1,625	7,351	93	17,209	196	655	18,060	-38	18,098	0	815	17,283
Jan.	8,250	1,579	7,114							18,288	0	885	17,403
Feb.	8,374	1,605	7,207							18,624	0	864	17,760
Mar.	8,374	1,636	6,921							18,446	0	834	17,612
Apr.	8,288	1,618	7,192							17,237	0	676	16,561
May	8,229	1,627	7,447							17,011	0	814	16,197
Jun	8,170	1,616	7,169							17,997	0	938	17,059
Jul	8,040	1,618	7,255							17,522	1	826	16,695
Aug.	8,079	1,616	7,360							18,296	0	814	17,482
Sep.	7,895	1,621	7,422							17,745	0	673	17,072
Oct.	8,023	1,661	7,787							18,312	0	732	17,580
Nov.	8,023	1,666	7,625							18,337	0	717	17,620
Dec.	7,942	1,634	7,700							19,373	0	1,008	18,365
1989													
Jan.	7,913	1,653	7,975							17,971	0	760	17,211
Feb.	7,830	1,601	7,825							18,640	0	875	17,765
Mar.	7,610	1,647	7,317							18,767	0	860	17,907

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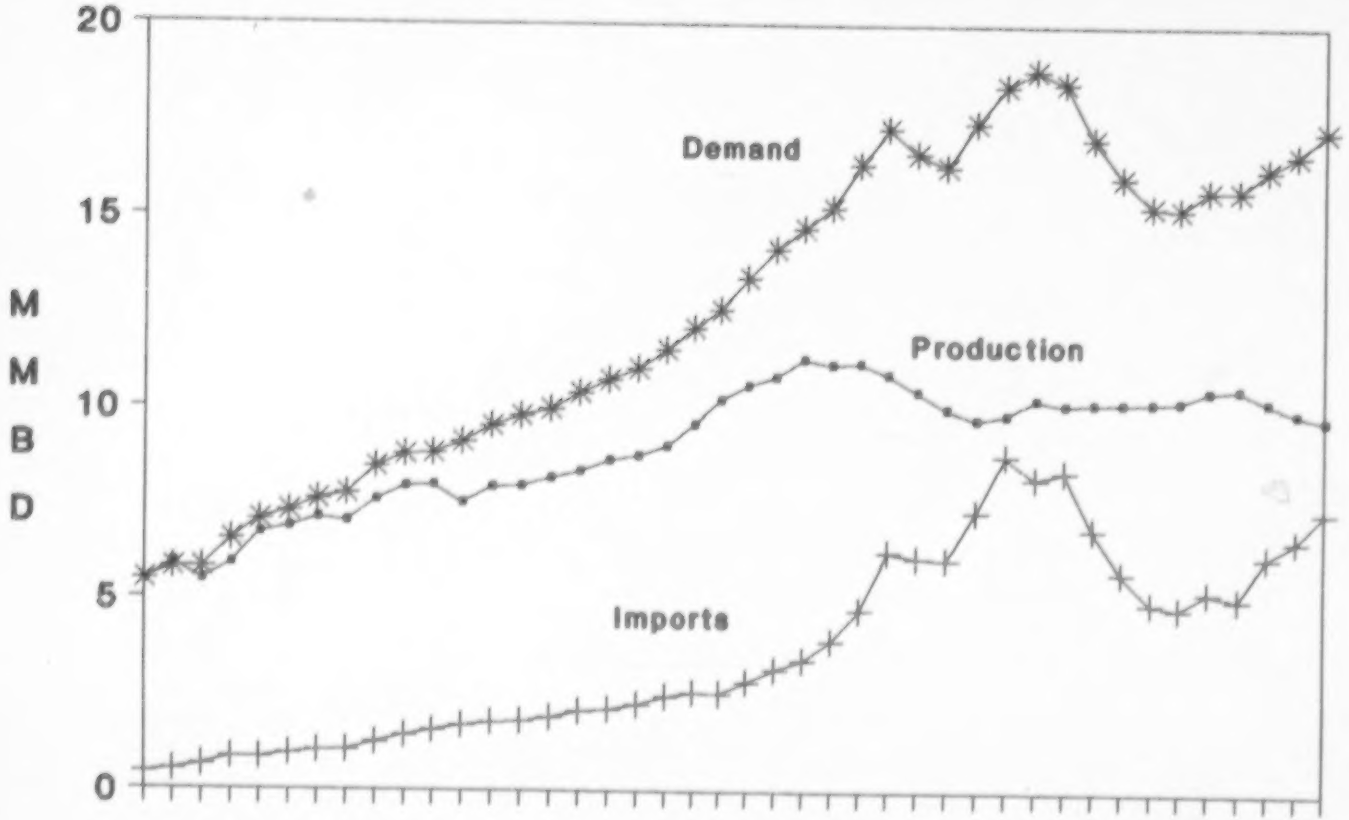
(1) Includes benzol, other hydrocarbons, and hydrogen.
(2) Represents the difference between supply and indicated demand for crude petroleum, first reported separately in 1968.
(3) Beginning with 1960, processing gains are reported separately; prior years include adjustments to permit a balance between total new supply and total supply.
(4) Figures may not add due to independent rounding.
(5) Excludes oil imported into the strategic petroleum reserve.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals and Petroleum Supply Monthlies.

Section VII
Table 2c

U.S. PRODUCTION, IMPORTS AND DEMAND



1947 - 1988

Source: Department of Energy

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	2,306	1	2,307	92,303	- 1	2,308	130	2,178
1948	2,513	1	2,514	103,756	+32	2,482	102	2,380
1949	2,632	-	2,632	111,443	+21	2,611	108	2,503
1950	2,806	-	2,806	116,769	+14	2,792	68	2,724
1951	3,122	1	3,123	134,867	+28	3,095	110	1,985
1952	3,219	4	3,223	134,737*	+ 1	3,222	99	3,123
1953	3,470	1	3,471	157,872	+64	3,407	104	3,303
1954	3,456	-	3,456	155,400	- 7	3,463	94	3,369
1955	3,764	1	3,765	165,433	+27	3,738	95	3,643
1956	3,904	4	3,908	187,271	+59	3,849	97	3,752
1957	3,940	8	3,948	196,776	+26	3,922	106	3,816
1958	3,944	38	3,982	186,760	-27	4,009	75	3,934
1959(2)	4,079	36	4,115	187,613	-	4,115	46	4,069
1960	4,160	27	4,187	194,774	+20	4,167	37	4,130
1961	4,199	29	4,228	195,830	+ 3	4,225	25	4,200
1962	4,338	38	4,376	190,138	+16	4,360	18	4,342
1963	4,452	44	4,496	190,937	+ 6	4,490	19	4,471
1964	4,539	29	4,568	193,633	+21	4,547	17	4,530
1965	4,670	27	4,697	183,058	-29	4,726	13	4,713
1966	4,911	43	4,954	194,177	+30	4,924	11	4,913
1967	5,057	42	5,099	207,980	+37	5,062	14	5,048
1968	5,301	59	5,360	211,526	+10	5,350	6	5,344
1969	5,557	62	5,619	217,392	+16	5,603	7	5,596

(2) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31(5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(6)
1970	5,768	67	5,835	214,348	- 8	5,843	4	5,839
1971	6,034	59	6,093	223,771	+25	6,068	5	6,063
1972	6,339	68	6,407	217,149	-18	6,425	2	6,423
1973	6,580	132	6,712	213,417	-11	6,723	5	6,718
1974	6,404	204	6,608	221,881(3)	+23	6,585	3	6,582
1975	6,558	184	6,742	238,002	+27	6,715	2	6,713
1976	6,877	131	7,008	234,272	-10	7,018	4	7,014
1977	6,982	218	7,200	257,623	+64	7,136	2	7,134
1978	7,117	190	7,307	241,002	-54	7,361	2	7,358
1979	6,889	181	7,070	239,919	- 3	7,073	--	7,073
1980	6,541	140	6,681	264,205	+66	6,615	--	6,615
1981	6,437	157	6,594	256,425(4)	-27	6,621	2	6,619
1982	6,362	197	6,559	246,935	-26	6,584	20	6,564
1983	6,365	248	6,613	225,042	-45	6,658	10	6,648
1984	6,478	299	6,777	246,307	+54	6,723	6	6,717
1985	6,441	381	6,822	225,148	-43	6,865	10	6,858
Jan.	5,943	204	6,147	236,571	+224	6,372	2	6,370
Feb.	5,937	348	6,285	227,837	+325	6,610	2	6,607
Mar.	6,096	481	6,577	221,706	+117	6,694	3	6,690
Apr.	6,369	494	6,863	217,664	+135	6,998	11	6,987
May	6,589	480	7,069	217,395	+27	7,096	8	7,088
Jun.	6,807	396	7,203	220,825	-171	7,032	7	7,025
Jul.	6,825	426	7,251	228,977	-190	7,061	18	7,043
Aug.	6,849	305	7,154	224,116	+128	7,282	4	7,277
Sep.	6,328	314	6,642	225,565	+23	6,665	6	6,658
Oct.	6,380	324	6,704	216,183	+238	6,942	19	6,924
Nov.	6,505	410	6,915	219,506	-100	6,805	17	6,790
Dec.	6,669	386	7,055	225,148	-219	6,836	18	6,818

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* Includes motor and aviation gasoline.

(3) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 228,282 thousand barrels.

(4) U.S. Department of Energy altered its stock reporting base as of January 1981. On the new basis, year-end 1980 stocks were 265,802 thousand barrels. This figure was used to compute the 1981 stock change.

(5) Includes blending components.

(6) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, P.A.D. District Supply/Disposition Annual.
1981-1985--U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 3b

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end(5) (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(6)
1986	6,784	326	7,110	235,490	+ 11	7,099	33	7,066
Jan.	6,542	332	6,874	240,680	+347	6,527	6	6,522
Feb.	6,333	334	6,667	246,139	+167	6,500	11	6,489
Mar.	6,082	224	6,306	221,219	-697	7,003	21	6,983
Apr.	6,528	291	6,819	209,801	-341	7,160	23	7,138
May	7,126	471	7,597	222,753	+447	7,150	9	7,141
Jun.	7,137	392	7,529	232,754	+267	7,262	18	7,244
Jul.	6,994	337	7,331	226,374	-187	7,518	47	7,472
Aug.	7,136	303	7,439	224,160	- 76	7,515	43	7,473
Sep.	6,956	304	7,260	236,700	+293	6,967	40	6,926
Oct.	6,646	322	6,968	225,153	-370	7,338	61	7,278
Nov.	6,917	280	7,197	232,201	+198	6,999	96	6,902
Dec.	6,982	320	7,302	235,490	+112	7,190	24	7,166
1987	6,866	384	7,250	228,770	- 15	7,266	35	7,231
Jan.	6,738	394	7,132	253,723	+533	6,598	44	6,554
Feb.	6,387	310	6,697	252,768	-143	6,840	22	6,818
Mar.	6,588	364	6,952	250,466	- 57	7,010	20	6,990
Apr.	6,867	374	7,241	243,932	-142	7,383	42	7,341
May	7,016	354	7,370	236,983	-169	7,538	48	7,490
Jun.	7,124	385	7,509	232,608	-105	7,614	46	7,568
Jul.	7,070	453	7,523	228,572	-119	7,643	33	7,610
Aug.	6,962	396	7,358	228,707	-29	7,387	19	7,368
Sep.	6,954	421	7,375	232,075	+115	7,260	30	7,230
Oct.	6,694	356	7,050	220,517	-301	7,351	21	7,330
Nov.	6,923	484	7,407	227,624	+206	7,201	32	7,169
Dec.	7,036	320	7,356	228,770	+ 29	7,326	59	7,267
1988	6,981	406	7,387	230,771	+ 2	7,385	22	7,363
Jan.	6,751	357	7,108	242,801	+385	6,724	8	6,716
Feb.	6,753	397	7,150	243,751	+ 70	7,079	18	7,061
Mar.	6,737	349	7,086	233,949	-281	7,367	18	7,349
Apr.	6,930	399	7,329	228,901	-144	7,473	18	7,455
May	6,881	440	7,321	228,253	- 43	7,364	28	7,336
Jun.	7,008	429	7,437	212,076	-471	7,908	59	7,849
Jul.	7,191	482	7,673	217,388	+147	7,527	12	7,515
Aug.	7,241	494	7,735	222,116	+135	7,599	15	7,584
Sep.	6,976	444	7,420	223,441	- 28	7,448	16	7,432
Oct.	6,884	352	7,236	219,910	+ 74	7,309	13	7,296
Nov.	7,080	451	7,531	223,400	-117	7,415	15	7,400
Dec.	7,328	278	7,606	230,771	+198	7,410	45	7,365

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* Includes motor gasoline and aviation gasoline.
(5) Includes blending components.
(6) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals.

U.S. SUPPLY AND DEMAND FOR TOTAL GASOLINE*
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks at month-end(5) (Thousands of Barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand(6)
1989								
Jan.	6,954	349	7,303	250,783	+515	6,788	33	6,755
Feb.	6,668	394	7,062	249,417	-73	7,135	24	7,111
Mar.	6,637	382	7,019	232,289	-471	7,489	43	7,446

* Includes motor gasoline and aviation gasoline.

(5) Includes blending components.

(6) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR MOTOR GASOLINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31(5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1964(1)	4,399	29	4,428	185,766	+23	4,405	2	4,403
1965	4,537	27	4,564	174,717	-30	4,594	1	4,593
1966	4,798	43	4,841	186,393	+31	4,810	2	4,808
1967	4,956	42	4,998	200,055	+ 7	4,961	3	4,958
1968	5,215	59	5,274	204,496	+13	5,261	1	5,260
1969	5,484	62	5,546	211,199	+18	5,528	2	5,526
1970	5,714	67	5,781	209,255	- 5	5,786	1	5,785
1971	5,984	59	6,043	219,352	+28	6,015	1	6,014
1972	6,292	68	6,360	212,894	-18	6,378	1	6,377
1973	6,535	134	6,669	209,478	-10	6,679	4	6,675
1974	6,360	204	6,564	218,410(2)	+24	6,540	2	6,538
1975	6,520	184	6,704	234,978	+28	6,676	2	6,674
1976	6,841	130	6,971	231,387	-10	6,981	3	6,978
1977	7,033	217	7,250	257,623	+73	7,177	2	7,175
1978(4)	7,169	190	7,359	237,979	-54	7,413	1	7,412
1979(4)	7,120	181	7,301	237,200	- 1	7,302	0(3)	7,302
1980(4)	6,814	140	6,954	261,398	+66	6,888	1	6,887
1981	6,405	157	6,562	253,001	-28	6,590	2	6,588
1982	6,338	197	6,535	243,876	-25	6,560	20	6,539
1983	6,340	247	6,587	222,434	-45	6,632	10	6,622
1984	6,453	299	6,752	243,296	+54	6,698	6	6,693
1985	6,419	381	6,800	222,839	-41	6,841	10	6,831
Jan.	5,926	204	6,130	233,663	-220	6,350	2	6,348
Feb.	5,914	348	6,262	224,884	-327	6,589	2	6,587
Mar.	6,072	481	6,553	218,816	-115	6,668	3	6,664
Apr.	6,344	494	6,838	214,979	-128	6,966	11	6,956
May	6,564	480	7,044	214,875	-23	7,067	8	7,060
Jun.	6,780	396	7,176	218,344	+172	7,004	7	6,997
Jul.	6,788	426	7,214	226,471	+188	7,026	18	7,008
Aug.	6,814	305	7,119	221,583	-127	7,246	4	7,242
Sep.	6,299	314	6,613	223,098	+22	6,635	6	6,629
Oct.	6,356	324	6,680	213,853	-235	6,915	19	6,897
Nov.	6,480	410	6,890	217,013	+104	6,786	17	6,770
Dec.	6,651	386	7,037	222,839	+227	6,810	18	6,792

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(1) Data prior to 1964 is not available on a comparable basis.

(2) U.S. Bureau of Mines altered its stock reporting as of January 1975. On the new basis, year-end 1974 stocks were 224,719 thousand barrels. This figure was used to compute the 1975 stock change.

(3) Totals do not add due to independent rounding.

(4) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate, and residual product supplies. Based on this raw methodology, API has reconstructed DOE data for 1978, 1979, and 1980. The stock reporting base was also altered as of January 1981. On the new basis, year-end 1980 stocks were 263,003 thousand barrels. This figure was used to compute the 1981 stock change.

(5) Includes motor gasoline blending components.

Source: U.S. Bureau of Mines, Annual Petroleum Statements.
U.S. Department of Energy, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 4a

TOTAL U.S. SUPPLY AND DEMAND FOR MOTOR GASOLINE
(Daily Averages in Thousand of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (5) (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1986	6,752	326	7,078	233,057	+ 11	7,067	33	7,034
Jan.	6,522	332	6,854	238,330	+347	6,507	6	6,502
Feb.	6,301	334	6,635	243,530	+156	6,479	11	6,469
Mar.	6,060	224	6,284	218,756	-691	6,975	21	6,955
Apr.	6,498	291	6,789	207,454	-338	7,127	23	7,105
May	7,094	471	7,565	220,502	+450	7,115	9	7,106
Jun.	7,100	392	7,492	230,480	+265	7,227	18	7,209
Jul.	6,956	337	7,293	224,028	-189	7,482	47	7,436
Aug.	7,091	303	7,394	221,586	- 83	7,477	43	7,435
Sep.	6,890	303	7,193	233,945	+289	6,904	40	6,864
Oct.	6,616	322	6,938	222,356	-372	7,312	61	7,250
Nov.	6,895	280	7,175	229,370	+200	6,975	96	6,879
Dec.	6,969	320	7,289	233,057	+122	7,167	24	7,143
1987	6,841	384	7,225	226,183	- 15	7,241	35	7,206
Jan.	6,714	393	7,107	251,111	+528	6,579	44	6,535
Feb.	6,365	309	6,674	250,082	-144	6,818	22	6,796
Mar.	6,568	364	6,932	248,050	- 51	6,984	20	6,964
Apr.	6,849	374	7,223	241,750	-133	7,356	42	7,314
May	6,991	354	7,345	234,908	-164	7,508	48	7,460
Jun.	7,089	385	7,474	230,421	-111	7,585	46	7,539
Jul.	7,042	452	7,494	226,353	-119	7,614	33	7,581
Aug.	6,932	396	7,328	226,459	- 29	7,357	19	7,338
Sep.	6,921	421	7,342	229,648	+107	7,235	30	7,205
Oct.	6,668	356	7,024	218,022	-302	7,326	21	7,305
Nov.	6,907	484	7,391	225,190	+208	7,183	32	7,151
Dec.	7,014	320	7,334	226,183	+ 24	7,310	59	7,251
1988	6,956	405	7,361	228,403	+ 3	7,358	22	7,336
Jan.	6,730	357	7,087	240,268	+387	6,701	8	6,693
Feb.	6,736	397	7,133	241,358	+ 75	7,057	18	7,039
Mar.	6,715	349	7,064	231,743	-277	7,341	18	7,323
Apr.	6,907	399	7,306	226,700	-142	7,448	18	7,430
May	6,850	437	7,287	226,108	- 43	7,331	28	7,303
Jun.	6,982	428	7,410	210,088	-465	7,876	59	7,817
Jul.	7,159	482	7,641	215,273	+148	7,494	12	7,482
Aug.	7,209	494	7,703	220,097	+131	7,571	15	7,556
Sep.	6,948	443	7,391	221,346	- 28	7,420	16	7,404
Oct.	6,857	352	7,209	217,690	- 75	7,284	13	7,271
Nov.	7,060	451	7,511	221,235	+118	7,394	15	7,379
Dec.	7,303	277	7,580	228,403	+192	7,389	45	7,344

(3) Total may not add due to independent rounding.
(5) Includes motor gasoline blending components.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR MOTOR GASOLINE
(Daily Averages in Thousand of Barrels)

Year	Supply			Stocks at month-end (5) (thousands of barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1989								
Jan.	6,935	349	7,284	248,549	+519	6,765	33	6,732
Feb.	6,648	392	7,040	247,097	-79	7,119	24	7,095
Mar.	6,615	381	6,996	230,000	-471	7,464	43	7,421

(3) Total may not add due to independent rounding.
(5) Includes motor gasoline blending components.

Source: U.S. Energy Information Administration, Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	864	12	876	51,081	- 23	899	82	817
1948	1,046	7	1,053	71,429	+ 64	989	58	931
1949	941	5	946	75,207	+ 10	936	34	902
1950	1,100	7	1,107	71,948	- 10	1,117	35	1,082
1951	1,311	5	1,316	86,619	+ 29	1,287	62	1,225
1952	1,422	8	1,430	99,375	+ 35	1,395	92	1,303
1953	1,452	9	1,461	111,741	+ 35	1,426	89	1,337
1954	1,490	9	1,499	108,144	- 9	1,508	66	1,442
1955	1,656	12	1,668	111,333	+ 9	1,659	67	1,592
1956	1,825	14	1,839	133,981	+ 62	1,777	94	1,683
1957	1,838	23	1,861	149,449	+ 42	1,819	131	1,688
1958	1,734	41	1,775	125,101	- 67	1,842	52	1,790
1959(1)	1,865	48	1,913	151,164	+ 70	1,843	35	1,808
1960	1,830	35	1,865	138,455	- 34	1,899	27	1,872
1961	1,911	47	1,958	152,018	+ 37	1,921	19	1,902
1962	1,975	33	2,008	144,505	- 21	2,029	22	2,007
1963	2,098	25	2,123	156,677	+ 35	2,088	41	2,047
1964	2,031	32	2,063	155,846	- 2	2,065	15	2,050
1965	2,099	36	2,135	155,407	- 1	2,136	10	2,126
1966	2,155	38	2,193	154,096	- 4	2,197	12	2,185
1967(2)	2,207	51	2,258	159,703	+ 5	2,253	12	2,241
1968	2,299	131	2,430	173,158	+ 37	2,393	4	2,389
1969	2,326	139	2,465	171,714	- 4	2,469	3	2,466
1970	2,460	148	2,608	195,271	+ 65	2,543	3	2,540
1971	2,503	153	2,656	190,622	- 13	2,669	8	2,661
1972	2,636	181	2,817	154,319	- 99	2,916	3	2,913
1973	2,824	392	3,216	196,481	+115	3,101	9	3,092
1974	2,671	289	2,960	200,068(3)	+ 10	2,950	2	2,948

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(1) These figures and those for subsequent years are on a 50-state basis.
(2) Production and stocks at gas processing plants are included in this and subsequent years.
(3) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 223,717 thousand barrels. This figure was used to compute the 1975 stock change (Table 5a).

SOURCE: U.S. Bureau of Mines, Annual Petroleum Statements

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels per Day)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (2)
1975	2,656	155	2,811	208,833	- 41	2,852	1	2,851
1976	2,925	146	3,072	185,986	- 62	3,134	1	3,133
1977	3,281	250	3,531	250,295	+178	3,353	1	3,352
1978(1)	3,171	173	3,344	216,463	- 93	3,437	3	3,435
1979(1)	3,167	197	3,364	228,729	+ 34	3,330	3	3,327
1980(1)	2,769	139	2,908	205,132	- 64	2,972	3	2,969
1981	2,623	173	2,796	191,541	- 38	2,834	5	2,829
1982	2,616	93	2,709	178,592	- 35	2,744	74	2,671
1983(3)	2,456	174	2,630	140,263	-124	2,754	64	2,690
1984	2,681	272	2,953	161,072	+ 57	2,896	51	2,845
1985	2,688	200	2,888	143,673	-48	2,936	67	2,868
Jan.	2,631	272	2,903	142,384	-603	3,506	41	3,465
Feb.	2,503	143	2,646	121,439	-748	3,394	64	3,330
Mar.	2,267	156	2,423	99,293	-714	3,137	44	3,093
Apr.	2,490	253	2,743	96,845	-82	2,825	27	2,798
May	2,686	197	2,883	104,432	+245	2,638	31	2,607
Jun.	2,647	152	2,799	109,688	+175	2,624	30	2,594
Jul.	2,646	95	2,741	115,683	+193	2,547	112	2,436
Aug.	2,592	81	2,673	113,755	-62	2,735	100	2,636
Sep.	2,594	222	2,816	117,367	+120	2,696	121	2,575
Oct.	2,902	262	3,164	123,417	+195	2,969	67	2,901
Nov.	3,103	280	3,383	139,719	+543	2,840	92	2,747
Dec.	3,175	287	3,462	143,673	+128	3,334	81	3,253
1986	2,797	347	3,044	155,097	+31	3,013	100	2,914
Jan.	2,899	325	3,224	136,490	-232	3,456	126	3,330
Feb.	2,563	169	2,732	112,402	-860	3,592	176	3,416
Mar.	2,643	217	2,860	98,811	-438	3,298	131	3,168
Apr.	2,787	147	2,934	95,907	-97	3,031	128	2,904
May	2,858	149	3,007	98,857	+95	2,912	149	2,762
Jun.	2,729	169	2,898	107,895	+301	2,597	53	2,544
Jul.	2,710	313	3,023	118,905	+355	2,668	75	2,593
Aug.	2,922	370	3,292	137,737	+607	2,685	64	2,621
Sep.	2,865	262	3,127	152,403	+489	2,638	98	2,540
Oct.	2,717	243	2,960	151,617	-25	2,985	74	2,912
Nov.	2,916	254	3,170	158,263	+222	2,948	72	2,876
Dec.	2,943	339	3,282	155,097	-102	3,384	55	3,329

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(1) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate, and residual product supplied. Based on this new methodology, API has reconstructed DOE data for 1978, 1979, and 1980.

(2) Totals may not add due to independent rounding.

(3) In 1983, DOE changed their methodology for calculating stocks. The 1983 stock change is based on DOE's revised stock figures for 1982.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 5b

TOTAL U.S. SUPPLY AND DEMAND FOR DISTILLATE FUEL OIL
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks at month-end (Thousands of Barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1987	2,730	255	2,985	134,485	- 56	3,042	66	2,976
Jan.	2,760	222	2,982	141,342	-444	3,426	115	3,310
Feb.	2,556	253	2,809	123,730	-629	3,438	93	3,345
Mar.	2,422	297	2,719	109,332	-464	3,183	67	3,116
Apr.	2,552	192	2,744	100,338	-300	3,044	53	2,991
May	2,563	203	2,766	101,286	+31	2,735	51	2,684
Jun.	2,689	265	2,954	104,391	+104	2,850	61	2,790
Jul.	2,700	381	3,081	114,602	+329	2,752	38	2,713
Aug.	2,705	222	2,927	124,735	+327	2,600	47	2,553
Sep.	2,748	222	2,970	126,762	+68	2,902	64	2,838
Oct.	2,780	237	3,017	120.974	-187	3,204	53	3,151
Nov.	3,036	187	3,223	128,004	+234	2,989	56	2,932
Dec.	3,241	378	3,619	134,485	+209	3,410	92	3,318
1988	2,858	302	3,160	123,517	- 30	3,191	69	3,122
Jan.	3,009	424	3,433	128,098	-206	3,640	82	3,558
Feb.	2,667	383	3,050	110,301	-614	3,664	107	3,557
Mar.	2,706	247	2,953	89,843	-660	3,613	74	3,539
Apr.	2,867	210	3,077	94,972	+171	2,906	42	2,864
May	2,936	253	3,189	104,879	+320	2,869	74	2,795
Jun.	2,893	222	3,115	110,418	+185	2,930	76	2,854
Jul.	2,784	222	3,006	119,955	+308	2,698	58	2,640
Aug.	2,848	279	3,127	125,689	+185	2,943	70	2,873
Sep.	2,778	307	3,085	131,451	+192	2,893	72	2,821
Oct.	2,827	336	3,163	128,248	-103	3,266	48	3,218
Nov.	2,910	327	3,237	128,805	+ 19	3,217	34	3,183
Dec.	3,068	409	3,477	123,517	-171	3,647	87	3,560
1989								
Jan.	2,973	331	3,304	120,290	-103	3,407	110	3,296
Feb.	2,798	322	3,120	107,549	-455	3,575	164	3,411
Mar.	2,714	439	3,153	96,625	-352	3,505	76	3,429

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 6

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks as of Dec. 31 (thousands of barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand
1947	1,301	149	1,450	47,091	--	1,450	29	1,421
1948	1,329	146	1,475	64,021	+72	1,403	36	1,367
1949	1,177	206	1,383	60,193	-11	1,394	35	1,359
1950	1,180	329	1,509	40,750	-53	1,562	45	1,517
1951	1,302	327	1,629	42,853	+ 3	1,626	80	1,546
1952	1,257	351	1,608	48,706	+16	1,592	76	1,516
1953	1,248	360	1,608	49,370	+ 2	1,606	71	1,535
1954	1,158	354	1,512	52,105	+ 8	1,504	73	1,431
1955	1,166	417	1,583	39,174	-36	1,619	93	1,526
1956	1,183	445	1,628	44,491	+15	1,613	76	1,537
1957	1,176	475	1,651	59,959	+42	1,609	105	1,504
1958	1,025	499	1,524	59,508	- 1	1,525	70	1,455
1959(1)	973	610	1,583	53,501	-18	1,601	57	1,544
1960	918	637	1,555	44,870	-24	1,579	51	1,528
1961	875	667	1,542	44,869	--	1,542	39	1,503
1962	820	724	1,544	49,996	+14	1,530	35	1,495
1963	765	747	1,512	47,538	- 6	1,518	42	1,476
1964	739	808	1,547	40,403	-20	1,567	52	1,515
1965	746	946	1,692	56,214	+43	1,649	41	1,608
1966	733	1,032	1,765	61,196	+14	1,751	35	1,716
1967	766	1,085	1,851	65,597	+ 5	1,846	60	1,786
1968	765	1,120	1,885	67,359	+ 5	1,880	54	1,826
1969	740	1,265	2,005	58,395	-19	2,024	46	1,978
1970	718	1,528	2,246	53,994	-12	2,258	54	2,204
1971	765	1,583	2,348	59,681	+16	2,332	36	2,296
1972	808	1,742	2,550	55,216	-12	2,562	33	2,529
1973	988	1,853	2,841	53,480	- 5	2,846	23	2,823
1974	1,083	1,587	2,670	59,694(2)	+17	2,653	14	2,639

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(1) These figures and those for subsequent years are on a 50 state basis.

(2) U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end 1974 stocks were 74,939 thousand barrels. This figure was used to compute the 1975 stock change (Table 7a)

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 6a

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand (3)
1975	1,251	1,223	2,474	74,126	- 2	2,476	15	2,461
1976	1,393	1,413	2,806	72,344	- 5	2,811	12	2,799
1977	1,767	1,359	3,126	89,993	+49	3,077	6	3,071
1978(1)	1,681	1,355	3,036	90,194	+ 1	3,037	13	3,024
1979(1)	1,708	1,151	2,859	95,598	+15	2,844	9	2,835
1980(1)	1,660	920	2,580	90,344	-14	2,594	33	2,561
1981	1,369	800	2,169	77,992	-37	2,206	118	2,088
1982	1,118	776	1,894	66,200	-32	1,926	209	1,716
1983(2)	852	699	1,551	48,504	-55	1,606	185	1,421
1984	891	681	1,572	53,000	+12	1,560	190	1,369
1985	882	510	1,392	50,381	-7	1,399	197	1,202
Jan.	1,004	568	1,572	46,201	-219	1,791	312	1,480
Feb.	1,040	580	1,620	45,053	-41	1,661	295	1,366
Mar.	963	477	1,440	46,127	+35	1,405	216	1,190
Apr.	912	383	1,295	46,195	+2	1,293	167	1,126
May	793	394	1,187	41,397	-155	1,342	185	1,156
Jun.	702	400	1,102	39,622	-59	1,161	118	1,043
Jul.	732	437	1,169	40,507	+29	1,140	83	1,058
Aug.	742	424	1,166	37,164	-108	1,274	106	1,168
Sep.	808	617	1,425	43,359	+207	1,218	188	1,031
Oct.	912	541	1,453	50,418	+228	1,225	184	1,041
Nov.	932	627	1,559	50,263	-5	1,564	275	1,290
Dec.	1,055	681	1,736	50,381	+4	1,732	250	1,483
1986	889	669	1,558	47,437	-8	1,566	147	1,418
Jan.	940	622	1,562	48,655	-56	1,618	211	1,407
Feb.	856	604	1,460	43,048	-200	1,660	183	1,478
Mar.	813	626	1,439	39,709	-108	1,547	113	1,435
Apr.	933	545	1,478	35,910	-127	1,605	202	1,402
May	913	675	1,588	39,431	+114	1,474	129	1,345
Jun.	818	712	1,530	42,767	+111	1,419	43	1,377
Jul.	850	673	1,523	40,333	-75	1,598	90	1,508
Aug.	896	793	1,689	41,346	_29	1,660	174	1,485
Sep.	854	641	1,495	44,006	+89	1,406	110	1,296
Oct.	827	635	1,462	45,822	+59	1,403	144	1,259
Nov.	975	574	1,549	46,275	+15	1,534	143	1,391
Dec.	987	913	1,900	47,437	+37	1,863	224	1,638

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(1) In 1981, the Department of Energy changed their methodology for calculating motor gasoline, distillate and residual product supplied. Based on this new methodology, API has reconstructed DOE data for 1978, 1979, and 1980.
(2) In 1983, the Department of Energy changed their methodology for calculating stocks. The 1983 stock change is based on DOE's revised figure for 1982.
(3) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 6b

TOTAL U.S. SUPPLY AND DEMAND FOR RESIDUAL FUEL OIL
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks at month-end (Thousands of Barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1987	885	565	1,450	47,410	--	1,450	186	1,264
Jan.	920	701	1,621	44,931	-81	1,702	198	1,504
Feb.	825	668	1,493	38,140	-243	1,736	221	1,515
Mar.	863	559	1,422	39,303	+38	1,384	150	1,234
Apr.	831	476	1,307	35,890	-114	1,421	239	1,182
May	813	505	1,318	40,371	+145	1,173	144	1,029
Jun.	864	481	1,345	41,356	+33	1,312	105	1,207
Jul.	901	721	1,622	44,694	+108	1,514	175	1,339
Aug.	882	512	1,394	45,690	+32	1,362	185	1,176
Sep.	904	526	1,430	44,417	-42	1,472	177	1,296
Oct.	887	414	1,301	45,619	+39	1,262	194	1,069
Nov.	928	568	1,496	49,975	+145	1,351	146	1,205
Dec.	1,001	650	1,651	47,410	-83	1,734	300	1,434
1988	926	644	1,570	44,621	- 8	1,578	200	1,378
Jan.	1,002	805	1,807	46,033	-44	1,851	190	1,661
Feb.	994	901	1,895	45,090	-33	1,927	229	1,698
Mar.	948	650	1,598	43,746	-43	1,641	165	1,476
Apr.	960	495	1,455	42,756	-33	1,488	170	1,318
May	862	432	1,294	45,662	+94	1,201	263	938
Jun.	880	336	1,216	42,165	-117	1,332	249	1,083
Jul.	906	479	1,385	41,007	-37	1,423	206	1,217
Aug.	866	581	1,447	38,007	-97	1,545	225	1,320
Sep.	852	698	1,550	44,592	+220	1,330	100	1,230
Oct.	852	603	1,455	42,470	- 68	1,524	181	1,343
Nov.	916	785	1,701	44,003	+ 51	1,650	146	1,504
Dec.	1,069	975	2,044	44,621	- 20	2,025	271	1,754
1989								
Jan.	948	877	1,825	46,966	+78	1,747	151	1,596
Feb.	929	863	1,792	45,982	-35	1,827	146	1,681
Mar.	936	703	1,639	42,400	-116	1,755	220	1,535

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

DELIVERIES OF DISTILLATE AND RESIDUAL FUEL OIL TO ELECTRIC UTILITIES
(Thousands of Barrels per Day)

Year	Distillate	Residual	Total	Total Fuel Oil Demand, All Sectors
1947	39	167	206	2,238
1948	41	155	196	2,298
1949	34	219	253	2,261
1950	36	255	291	2,599
1951	26	193	219	2,771
1952	23	192	215	2,819
1953	19	234	253	2,872
1954	17	194	211	2,873
1955	16	208	224	3,118
1956	15	202	217	3,220
1957	15	210	225	3,192
1958	15	211	226	3,245
1959(1)	14	225	239	3,352
1960(2)	13	233	246	3,400
1961	11	241	252	3,405
1962	11	242	253	3,502
1963	11	251	262	3,523
1964	10	267	277	3,565
1965	10	315	235	3,734
1966	10	378	388	3,901
1967	8	434	442(3)	4,027
1968	23(4)	505	528	3,215
1969	33	679	712	4,444
1970	68	856	924	4,744
1971	97	1,019	1,116	4,957
1972	187(5)	1,189	1,376	5,442
1973	214(5)	1,396	1,610	5,915
1974	232(5)	1,302	1,534	5,587
1975	174(5)	1,246	1,420	5,312
1976	165(5)	1,351	1,510	5,961
1977	210(5)	1,560	1,770	6,441
1978	211(5)	1,461	1,672	6,467
1979	128	1,333	1,461	6,162

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(1) These data include Alaska but not Hawaii.
(2) These data and those for subsequent years are on a 50-state basis.
(3) Electric public utility power plants only.
(4) These data and those for subsequent years include distillate sales for gas turbine plants.
(5) Includes kerosine jet fuel; 1972--24,000 bbls. per day; 1973--17,000 bbls. per day; 1974--14,000 bbls. per day; 1975--9,000 bbls. per day; 1976--11,600 bbls. per day; 1977--17,419 bbls. per day; 1978--12,342 bbls. per day.

Source: Energy Information Administration, Sales of Fuel Oil and Kerosine, Annuals
1979 -- Energy Information Administration, Petroleum Supply Annual.

DELIVERIES OF DISTILLATE AND RESIDUAL FUEL OIL TO ELECTRIC UTILITIES
(Thousands of Barrels per Day)

Year	Distillate	Residual	Total	Total Fuel Oil Demand, All Sectors
1980	87	1,066	1,153	5,531
1981	50	892	942	4,916
1982	33	623	656	4,387
1983	32	560	592	4,111
1984	45	509	554	4,214
1985	34	403	437	4,070
1986	40	590	630	4,333
1987	42	498	540	4,241

Source: 1980-1983: U.S. Energy Information Administration, Petroleum Supply Annuals
1984-1987: U.S. Energy Information Administration, Petroleum Marketing Monthly

Section VII
Table 8

MOTOR GASOLINE CONSUMPTION IN THE UNITED STATES
(Thousands of Gallons)

STATE	1962(1)	1963	1964	1965	1966	1967	1968	1969	1970
AL	1,067,093	1,108,056	1,173,601	1,225,510	1,289,379	1,336,173	1,418,671	1,497,778	1,576,614
AK	49,644	51,577	56,075	63,788	64,478	68,157	77,905	86,603	90,489
AZ	558,562	586,726	617,131	634,772	672,134	695,160	753,141	867,887	933,764
AR	665,031	696,979	729,755	760,282	790,413	822,045	870,295	919,093	957,861
CA	6,174,317	6,525,421	6,914,444	7,180,701	7,534,489	7,776,952	8,246,668	8,659,571	9,058,684
CO	734,160	757,265	788,491	816,177	849,421	884,608	957,039	1,020,840	1,109,271
CT	842,550	879,170	922,774	962,330	1,005,351	1,038,161	1,103,268	1,155,227	1,213,358
DE	195,355	205,954	206,598	215,135	224,394	227,476	237,703	250,885	266,966
DC	210,702	201,356	212,799	220,886	224,211	221,691	225,427	229,067	229,850
FL	1,915,904	2,006,222	2,126,210	2,243,581	2,385,233	2,515,867	2,748,550	2,994,281	3,232 450
GA	1,404,674	1,465,671	1,563,737	1,655,099	1,744,907	1,840,233	1,996,264	2,161,759	2,295,682
HI	151,197	152,457	160,106	169,841	177,491	181,998	200,126	213,780	221,973
ID	294,826	297,597	308,333	321,015	329,895	343,979	363,990	379,479	400,735
IL	3,277,932	3,382,046	3,506,222	3,638,663	3,819,091	3,879,185	4,160,075	4,312,652	4,408,829
IN	1,840,861	1,890,093	1,956,911	2,037,715	2,125,426	2,169,585	2,311,357	2,410,523	2,508,880
IA	1,206,366	1,243,196	1,264,294	1,295,595	1,372,526	1,422,541	1,458,129	1,499,697	1,516,878
KS	1,023,636	1,039,657	1,052,216	1,075,559	1,098,771	1,128,343	1,261,616	1,340,894	1,345,014
KY	957,804	996,318	1,041,346	1,092,893	1,145,238	1,216,404	1,288,696	1,362,736	1,438,058
LA	977,677	1,012,696	1,083,154	1,154,384	1,226,382	1,279,173	1,360,715	1,420,327	1,482,761
ME	346,745	354,350	368,636	382,716	394,953	405,061	426,000	442,582	465,138
MD	987,408	1,047,240	1,098,212	1,143,315	1,220,169	1,277,344	1,366,279	1,466,184	1,569,266
MA	1,490,870	1,533,611	1,592,022	1,651,647	1,712,057	1,766,218	1,873,028	1,954,415	2,078,906
MI	2,792,967	2,930,105	3,018,362	3,183,006	3,342,442	3,415,709	3,648,173	3,839,650	4,013,072
MN	1,372,457	1,415,974	1,451,934	1,495,423	1,572,099	1,610,761	1,707,502	1,798,954	1,879,177
MS	707,872	738,301	767,988	794,987	847,672	886,319	937,310	1,000,175	1,046,335
MO	1,722,913	1,773,359	1,838,699	1,893,743	1,983,408	2,036,025	2,147,273	2,270,371	2,373,032
MT	309,869	309,609	313,450	327,979	334,344	342,289	361,060	371,950	395,762
NE	633,965	655,102	676,866	690,018	718,456	733,607	762,982	799,783	814,936
NV	184,637	205,360	218,989	233,702	242,024	257,239	264,295	285,519	314,702
NH	212,076	221,306	233,389	244,485	262,392	275,998	300,730	322,299	346,298
NJ	2,045,680	2,148,500	2,222,915	2,322,560	2,391,674	2,447,834	2,594,999	2,676,054	2,802,641
NM	407,899	426,085	441,606	453,980	467,035	474,859	497,657	531,471	556,157
NY	4,068,568	4,198,606	4,405,589	4,549,269	4,730,616	4,865,488	5,027,115	5,454,249	5,506,910
NC	1,565,360	1,645,046	1,745,346	1,809,559	1,912,416	2,015,089	2,122,010	2,266,828	2,378,383
ND	321,951	331,251	342,523	347,480	346,264	345,032	357,520	374,952	380,364
OH	3,305,508	3,359,222	3,523,939	3,657,408	3,830,041	3,934,925	4,168,373	4,383,205	4,574,876
OK	983,966	1,008,420	1,049,671	1,077,090	1,135,940	1,171,121	1,235,953	1,300,609	1,372,638
OR	721,548	748,510	793,407	835,390	872,869	900,083	943,803	995,103	1,056,737
PA	3,300,176	3,369,210	3,492,876	3,599,184	3,695,541	3,849,853	4,030,622	4,170,261	4,347,667
RI	251,973	260,575	266,247	274,284	284,659	291,723	309,467	319,424	377,754
SC	773,812	805,150	839,056	888,535	944,289	988,231	1,074,726	1,136,709	1,209,516
SD	369,744	374,564	372,471	378,889	386,384	391,196	406,324	410,698	420,859
TN	1,200,616	1,245,849	1,324,458	1,370,742	1,463,854	1,545,576	1,609,233	1,721,094	1,792,235
TX	3,974,184	4,150,126	4,358,915	4,525,707	4,743,477	4,923,595	5,328,563	5,670,785	6,004,582
UT	344,939	358,369	369,398	382,693	402,191	414,702	450,967	478,390	511,959
VT	139,741	144,851	149,730	158,593	168,816	180,781	190,219	199,412	213,786
VA	1,332,670	1,345,478	1,410,858	1,479,876	1,544,631	1,599,174	1,693,865	1,790,109	1,900,620
WA	1,040,286	1,048,248	1,090,828	1,142,082	1,232,598	1,313,146	1,404,704	1,477,305	1,534,060
WV	494,792	507,715	520,633	540,240	569,235	590,460	630,982	652,414	691,539
WI	1,391,608	1,430,350	1,486,187	1,541,094	1,605,982	1,646,387	1,754,061	1,848,476	1,940,575
WY	186,282	190,205	194,451	197,524	201,114	205,770	221,582	233,411	246,667
TOT	62,531,373	64,779,104	67,663,848	70,337,126	73,686,872	76,139,326	80,867,012	85,415,920	89,405,266

(1) Prior to 1962 data not available on a comparable basis.
Source: U.S. Energy Information Administraton, Natural Gas Annuals
Note: The gallonage shown above represents consumption of motor gasoline, excluding sales to U.S. Government and sales of aviation gasoline.

Section VII
Table 8a

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1971	1972	1973	1974	1975	1976	1977	1978
AL	1,678,986	1,796,381	1,886,499	1,862,659	1,918,203	2,028,878	2,098,979	2,181,179
AK	92,064	111,594	123,995	163,070	193,725	214,140	204,006	209,118
AZ	998,011	1,094,225	1,201,122	1,147,782	1,191,998	1,250,917	1,325,630	1,405,574
AR	1,021,845	1,113,419	1,164,993	1,152,195	1,185,649	1,256,990	1,288,316	1,330,318
CA	9,363,091	9,995,752	10,307,287	9,887,993	10,166,056	10,684,270	11,242,281	11,754,669
CO	1,187,015	1,295,516	1,356,428	1,301,967	1,319,754	1,442,502	1,503,396	1,594,712
CT	1,261,342	1,309,281	1,324,085	1,327,308	1,351,553	1,393,196	1,417,026	1,432,855
DE	278,240	289,802	305,316	296,489	303,545	315,973	314,070	313,277
DC	232,950	232,422	248,626	240,457	243,215	229,031	225,434	221,831
FL	3,490,217	3,899,403	4,316,798	4,205,193	4,345,632	4,507,541	4,668,677	4,929,713
GA	2,466,166	2,679,515	2,830,556	2,739,639	2,773,264	2,913,600	3,002,467	3,114,628
HI	240,160	252,963	262,887	277,849	289,772	303,836	320,804	332,512
ID	421,403	451,315	468,321	457,785	482,462	520,640	530,225	563,708
IL	4,596,788	4,836,883	5,048,307	5,024,751	5,127,189	5,327,380	5,423,741	5,565,912
IN	2,590,540	2,740,984	2,846,485	2,739,043	2,762,822	2,801,466	2,911,250	3,017,500
IA	1,599,492	1,653,457	1,797,666	1,647,054	1,766,383	1,729,960	1,753,578	1,780,537
KS	1,339,516	1,428,354	1,377,262	1,329,122	1,378,773	1,462,585	1,433,106	1,504,662
KY	1,533,258	1,625,619	1,696,508	1,676,588	1,743,523	1,840,476	1,889,170	1,941,387
LA	1,538,410	1,685,138	1,744,770	1,756,343	1,830,011	1,986,865	2,076,160	2,157,919
ME	489,231	517,865	533,231	520,051	536,015	567,427	575,775	586,048
MD	1,664,565	1,775,394	1,840,506	1,789,440	1,880,724	1,962,715	2,027,804	2,065,378
MA	2,144,361	2,276,322	2,347,441	2,296,921	2,313,488	2,398,788	2,430,633	2,465,719
MI	4,268,082	4,537,187	4,748,355	4,565,132	4,630,247	4,885,908	4,950,597	5,010,304
MN	1,969,765	2,061,019	2,117,580	2,034,085	2,089,531	2,173,006	2,228,329	2,322,812
MS	1,103,053	1,202,673	1,234,423	1,195,373	1,192,595	1,254,446	1,322,865	1,332,417
MO	2,520,133	2,645,694	2,715,190	2,628,598	2,668,731	2,802,102	2,870,104	2,946,521
MT	425,158	427,048	440,456	448,019	461,411	493,245	511,714	531,445
NE	852,453	883,983	902,846	868,296	880,948	939,870	939,626	958,879
NV	333,806	365,954	389,776	382,610	409,496	434,031	464,832	509,705
NH	368,844	390,596	401,937	390,559	401,243	426,860	444,560	456,391
NJ	2,914,276	3,170,170	3,245,118	3,174,698	3,282,821	3,402,353	3,448,987	3,524,059
NM	603,704	646,830	686,811	683,532	708,455	760,885	779,366	821,722
NV	5,833,093	6,026,795	6,258,799	5,997,859	6,063,476	6,281,127	6,202,584	6,286,240
NC	2,497,823	2,713,709	2,813,722	2,820,286	2,864,661	3,012,863	3,123,577	3,259,167
ND	383,587	422,587	429,026	411,328	433,296	452,728	452,771	467,847
OH	4,695,627	4,960,046	5,194,284	5,006,097	5,095,243	5,273,960	5,445,906	5,510,753
OK	1,436,814	1,516,097	1,599,001	1,675,497	1,743,196	1,832,255	1,881,335	1,984,458
OR	1,116,118	1,191,714	1,239,689	1,187,671	1,224,276	1,310,983	1,369,886	1,441,886
PA	4,458,007	4,768,816	4,836,463	4,813,878	4,598,530	5,006,020	5,119,281	5,219,001
RI	392,111	401,314	407,135	371,740	395,532	384,525	405,832	412,404
SC	1,315,582	1,398,217	1,466,738	1,456,658	1,506,212	1,599,507	1,636,136	1,724,697
SD	439,796	464,493	474,646	456,444	501,055	474,182	489,910	497,196
TN	1,922,133	2,103,575	2,266,089	2,181,836	2,367,877	2,479,795	2,554,604	2,664,299
TX	6,464,768	6,888,155	7,350,539	7,099,280	7,535,342	8,077,479	8,496,289	8,737,658
UT	544,925	594,731	616,731	616,419	646,942	680,027	714,148	761,968
VT	226,536	242,597	245,662	235,325	240,270	255,094	260,155	269,204
VA	2,028,516	2,164,688	2,474,181	2,441,443	2,511,736	2,662,471	2,752,404	2,861,327
WA	1,577,951	1,647,546	1,716,314	1,666,944	1,741,625	1,863,713	1,954,975	2,052,403
WV	717,015	734,827	778,331	766,439	813,024	872,009	900,930	909,773
WI	2,013,424	2,146,830	2,208,977	2,145,544	2,197,391	2,299,086	2,356,462	2,448,434
WY	256,601	279,080	293,571	294,460	319,042	343,229	361,399	388,681
TOT	93,907,352	100,068,575	104,579,479	101,855,749	104,516,610	109,873,935	113,102,038	116,780,787

Source: Federal Highway Administration, "Monthly Motor Fuel Reported by States"
Note: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1979	1980	1981	1982	1983	1984	1985
Alabama	2,093,703	1,962,046	1,849,225	1,840,396	1,861,406	1,905,267	1,881,466
Alaska	219,472	201,373	212,804	235,112	221,229	248,993	267,709
Arizona	1,412,930	1,328,722	1,344,438	1,341,613	1,410,904	1,489,965	1,555,905
Arkansas	1,269,750	1,178,800	1,137,998	1,123,466	1,128,357	1,193,067	1,166,202
California	11,515,926	10,992,050	10,842,862	10,660,534	11,032,662	11,413,578	11,656,251
Colorado	1,554,521	1,503,288	1,506,429	1,513,235	1,560,776	1,514,511	1,558,918
Connecticut	1,372,667	1,327,582	1,296,048	1,284,966	1,308,077	1,339,766	1,393,470
Delaware	306,489	293,651	290,581	282,463	308,772	320,247	326,204
Dist. of Col.	214,782	171,451	171,082	170,518	168,019	181,199	163,074
Florida	4,905,642	4,810,520	4,845,057	4,900,197	5,078,234	5,261,730	5,462,027
Georgia	3,022,565	2,874,923	2,809,969	2,818,366	2,904,369	3,053,861	3,148,673
Hawaii	332,490	354,529	347,848	349,098	355,332	371,084	349,709
Idaho	538,740	488,333	471,054	456,063	459,377	458,332	463,502
Illinois	5,186,151	4,816,780	4,598,012	4,522,361	4,609,320	4,733,589	4,836,654
Indiana	2,897,500	2,686,146	2,616,773	2,431,388	2,479,277	2,934,238	2,559,430
Iowa	1,718,515	1,561,192	1,474,522	1,420,817	1,394,722	1,398,211	1,369,838
Kansas	1,406,812	1,310,568	1,268,609	1,236,159	1,240,248	1,245,120	1,234,260
Kentucky	1,868,006	1,755,397	1,729,135	1,721,620	1,734,296	1,764,567	1,736,511
Louisiana	2,158,327	2,081,328	2,103,397	2,145,094	2,151,035	2,166,617	2,132,374
Maine	541,664	517,014	497,749	505,620	519,891	530,799	548,083
Maryland	1,950,162	1,941,209	1,919,423	1,888,873	1,892,434	1,959,267	1,976,290
Massachusetts	2,411,996	2,301,675	2,249,956	2,235,986	2,266,746	2,340,189	2,388,603
Michigan	4,756,597	4,274,036	4,014,363	3,795,814	3,680,884	4,042,348	4,086,109
Minnesota	2,221,623	2,045,270	1,984,982	1,931,205	1,985,492	2,084,655	2,136,370
Mississippi	1,292,209	1,194,845	1,208,384	1,151,872	1,158,134	1,191,027	1,231,066
Missouri	2,786,256	2,602,627	2,528,616	2,494,373	2,536,042	2,601,207	2,614,239
Montana	499,397	459,950	445,641	452,371	459,851	455,738	441,744
Nebraska	907,383	816,426	798,518	792,579	776,930	780,071	777,136
Nevada	500,916	500,286	508,535	490,270	489,835	504,530	509,110
New Hampshire	433,556	411,214	398,692	393,276	405,203	434,424	446,902
New Jersey	3,367,400	3,260,992	3,150,798	3,172,525	3,371,871	3,358,178	3,311,078
New Mexico	793,452	746,655	742,486	744,599	740,916	764,343	783,404
New York	5,871,929	5,672,549	5,674,946	5,617,353	5,491,074	6,148,506	5,941,935
North Carolina	3,129,488	2,932,274	2,874,700	2,842,968	2,911,221	3,042,021	3,092,963
North Dakota	443,692	407,250	408,449	403,067	390,085	390,514	385,715
Ohio	5,356,650	4,982,574	4,766,658	4,561,134	4,634,793	4,744,494	4,739,030
Oklahoma	1,897,821	1,845,259	1,922,403	1,929,207	1,907,622	1,877,793	1,890,867
Oregon	1,385,047	1,330,612	1,271,001	1,211,110	1,222,903	1,263,213	1,254,669
Pennsylvania	5,041,809	4,700,328	4,474,475	4,384,130	4,370,547	4,422,335	4,429,756
Rhode Island	397,229	381,826	368,524	360,833	365,634	369,612	379,026
South Carolina	1,657,831	1,554,787	1,529,196	1,515,808	1,539,188	1,601,942	1,630,720
South Dakota	458,549	423,517	403,635	393,021	389,287	389,407	387,453
Tennessee	2,528,233	2,417,939	2,388,466	2,355,395	2,331,655	2,501,396	2,534,948
Texas	8,710,656	8,106,499	8,149,252	8,201,687	8,393,680	8,501,979	8,899,228
Utah	730,529	734,992	768,450	734,020	725,317	854,992	755,798
Vermont	252,404	238,842	234,114	236,905	242,056	252,093	252,812
Virginia	2,739,763	2,599,199	2,530,673	2,493,638	2,554,245	2,665,515	2,719,453
Washington	1,996,081	1,882,513	1,872,364	1,851,127	1,919,152	2,000,333	1,912,436
West Virginia	888,849	845,242	804,632	810,848	801,736	800,672	801,431
Wisconsin	2,352,463	2,177,363	2,067,800	1,982,060	2,011,843	2,022,610	2,022,990
Wyoming	381,674	373,723	375,068	359,425	338,752	358,077	332,978
Total	112,678,296	106,378,366	104,248,792	102,747,065	104,231,431	108,248,222	108,876,519

NOTE: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

Source: Department of Transportation, Federal Highway Administration, Highway Statistics (Annual) Table MF-33GA.

MOTOR GASOLINE SALES IN THE UNITED STATES
(Thousands of Gallons)

STATE	1986	1987	1988(p)
Alabama	2,012,114	2,084,218	2,072,236
Alaska	256,534	242,578	246,038
Arizona	1,635,083	1,683,355	1,708,609
Arkansas	1,212,035	1,241,796	1,272,178
California	12,175,654	12,543,126	12,900,366
Colorado	1,592,000	1,565,700	1,584,881
Connecticut	1,443,603	1,484,832	1,499,633
Delaware	333,247	338,285	347,242
Dist. of Col.	167,549	181,371	186,686
Florida	5,690,765	5,914,696	NA
Georgia	3,313,314	3,421,117	3,539,768
Hawaii	364,615	384,958	376,090
Idaho	469,394	462,202	478,952
Illinois	4,731,675	4,772,357	4,971,834
Indiana	2,622,218	2,745,535	2,760,066
Iowa	1,367,462	1,369,663	1,395,039
Kansas	1,248,854	1,265,811	1,326,752
Kentucky	1,850,343	1,855,460	1,889,808
Louisiana	2,160,554	2,062,830	2,064,779
Maine	582,048	606,596	658,179
Maryland	2,027,743	2,068,369	2,099,811
Massachusetts	2,458,079	2,491,662	2,542,571
Michigan	4,187,028	4,287,736	4,389,647
Minnesota	2,040,806	2,033,108	2,092,710
Mississippi	1,261,173	1,270,055	1,264,910
Missouri	2,762,114	2,754,512	2,780,023
Montana	443,446	440,858	448,745
Nebraska	776,830	776,125	801,447
Nevada	535,099	567,686	605,424
New Hampshire	481,789	514,167	527,610
New Jersey	3,524,601	3,586,002	3,491,849
New Mexico	800,775	812,713	848,818
New York	5,957,386	6,168,884	NA
North Carolina	3,227,688	3,318,096	3,493,483
North Dakota	376,068	381,284	365,846
Ohio	4,878,206	5,012,222	5,013,407
Oklahoma	1,848,704	1,772,817	1,685,946
Oregon	1,294,515	1,312,919	1,364,831
Pennsylvania	4,523,848	4,590,386	4,736,281
Rhode Island	394,173	396,573	401,304
South Carolina	1,700,307	1,680,761	NA
South Dakota	394,961	392,527	396,289
Tennessee	2,651,534	2,754,514	2,567,204
Texas	9,085,634	8,865,928	9,046,463
Utah	766,726	764,441	779,897
Vermont	259,631	282,232	291,291
Virginia	2,815,511	2,993,746	3,022,281
Washington	2,034,097	2,215,360	2,241,154
West Virginia	806,401	829,349	840,609
Wisconsin	2,061,116	2,046,604	2,117,182
Wyoming	328,877	313,409	318,867
TOTAL	111,933,927	113,930,521	NA

(p) Preliminary NA=Not Available

NOTE: The gallonage shown above represents consumption of motor gasoline and includes sales to U.S. Government and sales of aviation gasoline. Excludes exports and dealer transfers.

Source: Department of Transportation, Federal Highway Administration, Table MF-33GA.

Section VII
Table 9

U.S. SALES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
AL	1,937	2,493	2,340	2,692	2,846	3,073	3,186	3,508	3,914	4,277	4,326	4,346	4,891	5,370
AK	--	--	--	--	--	--	--	--	--	--	--	--	2,618	2,616
AZ	1,173	1,342	1,021	1,020	1,233	1,341	1,329	1,279	1,073	1,716	1,742	2,018	2,100	2,774
AR	1,733	1,838	2,162	2,414	2,244	2,325	2,222	2,136	2,357	2,558	2,575	2,433	2,175	2,052
CA	20,481	22,573	21,232	19,212	22,031	23,875	24,063	23,812	23,873	24,643	24,613	24,884	26,357	26,697
CO	1,724	1,976	1,683	1,831	2,036	2,503	2,732	3,108	3,371	3,532	3,585	3,238	3,099	4,225
CT	8,635	10,487	9,510	11,067	11,777	12,286	12,520	14,928	16,071	18,490	18,574	23,885	22,176	23,230
DE	783	866	1,013	1,285	1,556	1,702	1,861	2,365	2,677	3,235	3,245	2,413	2,487	2,723
DC	2,733	2,789	2,246	2,433	2,982	3,368	3,458	3,728	3,907	4,139	4,124	3,402	2,719	2,914
FL	3,760	4,068	3,824	4,648	5,343	6,863	7,176	8,441	9,613	10,169	10,188	8,150	8,190	8,971
GA	1,956	2,593	2,604	3,202	3,962	4,262	4,119	4,225	4,560	4,914	4,877	4,887	4,731	5,117
HI	--	--	--	--	--	--	--	--	--	--	--	--	--	876
ID	1,034	1,570	1,562	1,770	2,291	2,457	2,595	3,080	3,706	3,837	3,834	3,938	3,734	4,055
IL	20,906	21,622	19,582	26,320	28,517	29,061	29,021	30,388	33,371	35,290	35,350	42,869	43,008	42,490
IN	6,153	8,429	8,080	10,776	13,205	13,968	15,166	16,294	18,962	20,441	20,482	24,099	24,500	25,596
IA	6,099	7,435	7,610	8,925	9,791	10,204	10,488	10,399	11,417	12,543	12,548	9,883	11,360	11,141
KS	2,881	4,094	3,185	4,527	5,552	5,695	5,938	5,897	6,493	6,388	6,361	4,477	5,060	4,751
KY	1,586	1,980	1,956	2,274	2,753	3,250	3,359	3,291	4,126	4,476	4,548	4,978	5,800	4,833
LA	3,274	4,268	4,021	4,619	5,224	5,840	6,212	6,242	7,385	7,653	7,877	10,756	11,249	10,694
ME	2,266	2,638	2,576	3,496	3,935	4,276	4,514	5,309	5,703	6,425	6,426	6,434	7,108	7,456
MD	7,551	8,442	7,691	8,981	10,898	11,189	11,731	14,468	16,009	17,916	18,091	16,086	12,495	13,101
MA	19,290	20,919	19,741	22,769	27,261	28,064	27,925	31,306	34,036	35,859	35,981	47,452	47,781	51,022
MI	12,277	13,713	14,562	18,493	20,334	22,268	22,351	24,625	27,402	29,071	28,995	29,385	28,387	30,464
MN	9,327	10,229	10,094	12,448	14,560	15,478	15,784	16,218	17,409	18,765	18,726	16,468	15,079	16,241
MS	912	1,002	1,010	1,271	1,507	1,502	1,774	1,619	1,808	1,840	1,856	1,744	2,318	2,364
MO	7,072	8,110	6,822	7,815	8,684	10,224	10,854	11,283	12,137	12,306	12,418	14,274	12,700	12,830
MT	1,660	1,810	1,965	2,478	2,851	3,063	3,553	3,755	3,980	4,219	4,209	3,642	4,474	4,877
NE	3,340	3,744	3,386	3,707	3,829	4,071	4,378	4,723	5,229	5,561	5,549	3,527	3,929	4,183
NV	951	1,363	1,772	1,843	2,102	2,158	2,281	2,375	1,686	1,748	1,679	1,656	2,051	2,428
NH	1,387	1,455	1,945	2,765	3,102	3,442	3,370	4,220	4,498	5,123	5,089	3,951	4,049	4,484
NJ	26,011	28,755	26,993	30,521	32,298	33,028	33,124	35,733	38,971	41,335	41,370	42,923	45,634	45,542
NM	708	653	715	950	972	1,224	1,309	1,457	1,991	2,167	2,205	2,492	2,302	3,065
NY	38,888	45,902	45,252	52,173	56,334	59,373	59,604	64,262	70,276	72,606	72,755	85,779	79,499	81,677
NC	2,552	3,220	3,491	4,354	5,490	6,360	7,381	7,860	8,982	9,279	9,312	10,406	11,544	13,353
ND	1,067	1,312	1,616	1,939	2,026	2,456	2,425	2,600	3,151	3,740	3,726	2,976	3,632	3,775
OH	7,479	10,120	9,442	12,059	14,474	15,953	16,542	18,150	20,184	21,937	22,045	24,221	24,850	23,836
OK	1,084	1,571	1,929	1,928	2,223	2,192	2,436	2,368	2,493	2,454	2,470	1,754	2,603	2,631
OR	5,720	6,181	6,343	7,725	8,534	8,974	8,680	8,939	10,981	10,862	10,132	9,380	10,456	10,920
PA	19,916	22,198	20,849	28,266	34,585	35,827	36,513	40,288	44,286	45,734	45,698	45,322	44,029	45,668
RI	3,389	3,413	3,408	4,116	4,260	4,343	4,482	4,484	4,762	5,513	5,530	7,250	7,167	8,093
SC	1,427	1,662	1,630	1,854	2,202	2,491	3,004	2,990	3,259	3,445	3,588	4,266	4,454	5,203
SD	1,338	1,434	1,510	1,893	2,133	2,399	2,626	2,756	3,298	3,556	3,508	2,800	2,882	2,964
TN	2,018	2,143	2,125	3,062	3,428	3,487	3,628	3,529	3,845	3,767	3,652	3,226	5,037	5,268
TX	8,035	10,120	9,238	12,790	16,183	19,022	19,046	18,913	20,728	22,258	22,812	24,077	26,541	24,315
UT	1,223	1,448	1,474	2,001	2,334	3,263	3,542	3,574	3,994	4,235	4,256	4,655	3,478	3,841
VT	816	875	1,054	1,117	1,166	1,212	1,321	1,415	1,726	1,937	1,883	2,796	2,399	2,939
VA	4,539	5,319	5,380	7,855	9,156	9,800	9,442	10,888	13,242	14,293	14,782	13,300	12,984	14,184
WA	9,602	11,005	11,215	12,954	14,145	14,904	14,277	15,438	17,767	17,237	17,518	14,915	16,867	18,045
WV	475	585	554	651	1,229	1,188	1,331	1,307	1,500	2,095	2,039	1,913	2,154	2,462
WI	8,203	8,609	8,279	10,285	11,437	11,803	11,877	13,648	16,089	17,099	17,149	20,136	20,316	21,711
WY	643	1,600	1,504	1,732	1,893	2,103	2,294	2,624	2,829	3,092	2,977	3,697	3,539	3,258
TOT	298,014	341,973	329,196	395,306	448,908	479,210	488,844	526,245	581,127	615,775	617,275	653,559	658,992	683,325

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

Section VII
Table 9a

U.S. SALES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Gallons)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Alabama	4,310	4,938	5,148	5,887	5,335	5,239	4,148	6,556	7,378	8,510	8,849	12,093
Alaska	2,849	2,897	3,076	3,482	3,733	4,049	4,353	4,757	4,869	5,082	6,352	6,207
Arizona	3,107	3,001	3,520	3,528	3,584	4,030	3,761	4,599	4,722	4,898	5,242	8,786
Arkansas	3,078	2,451	2,579	3,358	2,899	3,259	3,282	4,079	4,647	5,474	5,489	9,412
California	27,410	29,685	32,256	34,991	35,672	38,335	38,767	38,519	39,112	39,188	47,357	45,797
Colorado	4,441	4,148	4,580	4,074	4,002	4,670	4,811	5,574	5,490	5,211	6,242	6,784
Connecticut	23,199	23,099	22,906	20,378	21,415	20,408	20,785	21,748	22,673	24,147	24,100	24,735
Delaware	2,537	3,097	3,474	3,257	3,361	3,381	3,417	3,918	4,097	4,309	4,345	4,298
Dist. of Col.	2,726	2,878	2,872	2,957	3,566	3,489	3,424	3,525	4,377	4,934	3,834	3,314
Florida	9,369	10,611	10,902	11,076	12,456	14,179	13,733	14,794	14,913	15,698	16,525	19,488
Georgia	5,269	6,218	6,969	6,977	8,666	10,059	11,558	12,013	12,540	12,784	14,638	16,491
Hawaii	1,666	1,641	1,375	1,769	1,613	1,369	1,190	1,381	1,573	1,695	1,706	1,622
Idaho	4,037	4,204	4,108	4,501	4,880	4,916	7,433	7,748	5,844	5,597	5,702	5,866
Illinois	42,255	41,361	41,421	41,580	41,702	39,831	39,846	42,795	44,498	44,517	49,467	55,276
Indiana	25,452	25,743	25,934	25,813	26,340	26,338	26,538	27,355	29,493	29,363	30,670	34,233
Iowa	10,043	11,022	11,106	10,968	11,256	12,579	12,823	14,172	13,828	13,681	14,242	14,975
Kansas	5,187	5,242	4,612	5,487	5,405	6,310	6,009	6,660	6,488	7,559	8,401	9,166
Kentucky	4,426	5,822	5,532	5,697	5,659	7,068	6,901	7,304	7,865	8,209	7,776	9,470
Louisiana	9,038	9,622	9,762	9,688	8,517	9,284	7,847	9,858	10,737	11,796	13,384	17,644
Maine	8,307	8,645	9,487	8,792	9,424	9,038	10,110	10,647	11,417	11,837	12,120	12,744
Maryland	14,257	15,146	16,014	16,863	17,361	18,016	17,851	18,759	18,618	19,860	20,000	21,435
Massachusetts	52,266	53,448	51,664	49,966	56,694	51,262	54,943	56,315	58,399	59,211	61,609	63,616
Michigan	30,547	31,131	30,471	29,576	31,079	32,127	37,376	36,601	37,473	38,108	41,684	48,660
Minnesota	15,967	16,776	16,629	16,739	19,227	21,195	20,083	22,233	22,121	22,390	23,777	25,979
Mississippi	1,954	2,715	2,885	3,322	2,841	3,169	3,459	5,097	5,775	5,987	7,215	9,413
Missouri	12,858	13,412	13,939	13,884	14,077	13,908	13,924	17,067	16,473	16,218	16,350	18,101
Montana	5,248	5,522	5,400	5,684	5,041	5,802	3,459	4,119	4,669	4,823	5,709	6,121
Nebraska	4,481	4,099	4,387	4,689	3,789	4,590	5,311	6,487	6,492	7,459	7,604	9,002
Nevada	2,985	3,017	2,844	3,523	2,821	2,495	2,350	2,693	2,767	2,832	3,151	2,924
New Hampshire	5,486	5,834	6,327	5,742	5,907	6,073	6,823	7,106	7,490	7,676	8,085	8,303
New Jersey	46,992	48,622	51,466	51,655	54,123	57,123	58,871	60,056	62,077	63,447	64,769	72,659
New Mexico	2,841	3,512	3,642	3,946	3,971	3,647	3,064	4,183	4,547	5,405	5,395	6,569
New York	86,029	94,501	95,856	94,610	104,690	102,827	107,192	106,843	108,646	111,122	113,833	122,075
N. Carolina	13,366	15,617	16,000	16,249	17,428	20,869	20,577	19,944	20,407	22,553	21,609	23,030
N. Dakota	3,693	4,472	4,584	4,529	5,252	6,008	6,036	6,156	5,959	4,973	4,915	5,135
Ohio	23,433	24,250	26,348	27,121	28,132	31,216	31,161	34,025	34,386	34,435	35,090	41,414
Oklahoma	3,152	3,243	3,729	3,325	2,950	3,618	3,980	5,173	4,961	5,573	5,473	7,828
Oregon	11,061	11,777	12,828	13,855	13,295	13,837	13,083	13,298	13,646	12,895	14,162	15,467
Pennsylvania	45,982	49,315	51,702	50,699	54,818	54,501	57,146	59,721	60,668	63,544	63,221	70,757
Rhode Island	7,547	7,411	7,391	6,272	7,017	6,627	7,287	7,746	8,517	8,623	9,070	9,176
S. Carolina	5,116	5,776	6,169	5,228	4,910	6,541	6,542	7,788	8,543	9,469	9,114	9,722
S. Dakota	3,085	3,212	3,370	3,823	3,838	4,130	3,875	3,830	3,802	4,372	4,600	4,469
Tennessee	5,552	6,167	6,706	6,784	7,414	9,404	8,902	10,278	10,432	10,945	11,609	14,218
Texas	21,795	23,959	24,092	23,998	25,280	23,311	23,022	24,457	29,791	32,398	34,884	46,515
Utah	3,085	3,607	3,640	3,766	4,275	4,886	4,702	4,750	5,028	5,104	6,515	6,310
Vermont	3,299	3,602	3,787	3,603	4,318	4,825	4,946	5,058	5,514	5,732	5,472	5,729
Virginia	14,631	15,843	16,945	16,542	18,941	21,304	21,796	22,286	23,218	24,624	24,441	25,020
Washington	17,532	17,057	16,791	17,997	17,390	17,910	16,459	17,792	18,201	18,188	18,621	19,090
W. Virginia	2,525	2,490	2,622	2,320	2,882	3,177	3,303	3,743	3,786	3,913	4,658	5,532
Wisconsin	22,153	23,399	23,461	23,328	23,902	24,446	26,918	26,341	26,084	25,827	26,520	26,781
Wyoming	3,250	3,838	3,816	3,653	3,743	3,038	4,023	5,153	5,249	5,055	5,724	5,419
TOTAL	690,874	729,095	748,124	747,551	786,891	809,713	829,200	873,100	900,300	927,250	971,320	1,074,870

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

U.S. DELIVERIES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1973	1974	1975	1976(1)	1977(1)	1978(1)	1979	1980	1981	1982	1983
AL	13,988	14,761	14,488	18,032	19,624	20,194	15,996	19,419	17,939	15,436	15,457
AK	6,384	6,591	6,946	9,517	10,187	10,571	5,808	6,781	6,548	6,335	7,066
AZ	15,118	11,197	11,481	10,181	13,727	13,829	13,194	11,330	9,741	8,102	8,792
AR	9,949	10,316	9,392	10,228	12,451	13,014	16,163	14,209	13,116	13,336	13,389
CA	51,165	42,991	43,129	45,545	54,009	60,126	68,104	61,338	67,494	67,337	68,413
CO	7,737	8,712	8,590	9,408	9,688	10,023	10,451	9,665	8,634	9,132	10,915
CT	25,181	22,677	21,844	23,706	23,249	23,011	27,916	22,499	19,745	20,509	16,933
DE	4,382	4,310	4,487	4,615	5,096	4,840	3,685	3,702	3,133	2,753	3,376
DC	3,462	3,497	3,112	3,781	4,005	6,204	4,364	3,436	2,125	2,215	2,769
FL	22,662	22,599	23,083	24,268	28,236	28,920	28,084	28,520	29,816	22,503	27,765
GA	20,478	20,835	16,922	22,480	22,559	19,641	18,692	19,397	19,388	18,387	21,917
HI	1,839	1,897	2,512	2,370	3,502	3,246	6,451	5,915	6,043	4,570	2,327
ID	6,297	6,876	7,378	7,346	7,983	8,362	6,504	4,879	4,775	4,496	5,263
IL	54,288	53,950	52,103	58,877	58,459	61,760	48,584	36,086	34,427	32,521	35,503
IN	34,353	34,516	33,314	36,193	38,044	39,278	35,653	30,488	28,961	28,913	27,720
IA	15,467	14,751	14,249	15,257	16,012	16,687	20,595	15,793	14,374	16,212	14,086
KS	10,330	11,080	11,328	11,986	12,484	14,317	18,960	13,923	13,239	13,817	13,921
KY	10,457	10,176	10,760	13,566	16,845	18,809	20,608	22,598	18,217	17,507	20,442
LA	24,677	24,766	22,139	23,324	32,251	33,185	37,224	32,804	37,964	30,858	31,105
ME	12,147	11,659	11,331	13,407	14,476	13,373	11,218	10,627	9,266	9,189	7,325
MD	22,591	22,094	21,712	20,571	21,748	21,341	23,971	22,417	18,365	16,198	18,881
MA	62,970	58,934	57,195	61,666	59,564	57,446	42,347	37,413	32,155	32,263	31,364
MI	47,146	44,204	41,747	43,826	44,835	45,461	30,892	27,841	26,657	22,819	22,525
MN	26,768	24,185	23,974	27,513	26,645	27,807	26,069	21,826	18,714	20,880	17,413
MS	13,045	14,372	12,188	13,713	14,584	16,306	12,277	12,905	13,487	11,849	13,306
MO	18,781	17,424	17,106	19,555	20,588	23,027	22,780	18,150	18,003	20,738	16,762
MT	6,924	7,646	7,459	8,383	8,141	8,114	7,774	6,626	6,486	5,814	8,883
NE	9,262	8,684	8,363	10,178	10,643	12,127	12,601	9,145	8,233	9,176	11,580
NV	3,304	2,561	2,535	2,715	3,055	3,822	3,189	4,022	3,488	3,518	5,304
NH	8,208	7,551	7,047	8,758	8,231	8,292	5,741	5,845	5,313	5,084	4,520
NJ	74,564	67,426	58,937	61,787	60,052	56,592	50,447	52,719	50,973	45,546	38,917
NM	7,948	7,635	8,080	8,022	9,337	9,633	10,431	10,222	12,526	7,954	6,705
NY	120,200	108,677	104,646	115,237	114,446	114,344	88,449	72,515	64,263	62,608	56,525
NC	24,898	22,246	20,965	23,881	27,107	24,749	29,404	23,820	21,228	20,184	24,626
ND	4,626	4,303	4,362	4,061	4,069	4,194	8,268	8,037	7,708	7,209	6,867
OH	41,415	40,831	42,160	51,519	52,501	55,346	44,952	48,397	44,959	40,250	33,180
OK	8,814	8,744	9,696	11,775	12,775	14,477	14,119	12,051	15,519	14,557	16,635
OR	16,070	14,324	13,240	14,062	16,794	16,671	19,281	17,051	16,492	15,020	16,094
PA	70,793	71,508	66,341	74,691	77,861	73,311	76,651	68,066	59,977	53,065	51,763
RI	8,633	8,038	7,787	8,478	8,199	7,679	7,042	5,046	3,993	3,984	4,736
SC	10,956	9,636	8,132	10,218	12,972	11,023	11,894	10,730	9,841	9,462	10,592
SD	4,140	3,586	3,821	3,311	3,042	3,670	6,166	4,842	4,406	5,131	4,464
TN	15,310	15,815	17,657	21,469	24,071	26,825	23,504	18,818	19,512	18,764	21,519
TX	57,567	58,766	55,262	58,655	74,678	81,171	96,359	95,939	90,359	90,180	95,849
UT	7,792	8,624	8,962	8,367	8,631	9,023	8,150	7,412	7,115	6,425	6,459
VT	6,001	4,981	4,566	5,394	5,274	5,135	5,389	4,076	3,828	2,707	3,457
VA	26,561	24,938	24,534	25,339	28,332	27,161	33,726	24,406	23,638	21,943	25,087
WA	20,091	16,345	16,606	18,405	19,800	20,765	21,776	18,709	17,695	18,200	16,382
WV	5,992	5,622	6,478	6,807	9,019	8,796	10,904	10,340	9,450	7,659	9,930
WI	27,264	26,330	26,035	30,366	31,107	32,940	31,504	22,539	20,726	20,537	20,399
WY	6,138	6,897	7,565	8,120	9,211	10,423	10,063	11,375	12,452	11,015	7,219
TOT	1,135,063	1,081,086	1,043,746	1,150,929	1,230,179	1,257,061	1,214,374	1,086,709	1,032,476	974,864	981,926

Source: U.S. Department of Energy, Sales of Fuel Oil and Kerosine, Petroleum Supply Annuals, and Petroleum Marketing Monthly, July 1985

Section VII
Table 9c

U.S. DELIVERIES OF DISTILLATE FUEL OILS BY STATE
(Thousands of Barrels)

STATE	1984	1985	1986	1987
Alabama	16,234	16,402	16,596	18,885
Alaska	7,840	10,163	7,994	8,198
Arizona	9,885	10.049	11,147	10,405
Arkansas	16,243	15,076	13,536	13,703
California	76,288	72,468	74,955	74,040
Colorado	11,344	9,621	10,140	9,876
Connecticut	18,544	18,937	20,501	21,082
Delaware	3,556	3,398	3,281	4,047
Dist. of Col.	3,054	2,476	2,835	2,668
Florida	29,210	30,320	31,953	32,960
Georgia	23,865	23,676	24,528	26,007
Hawaii	2,766	4,631	4,676	4,289
Idaho	5,898	5,596	5,914	6,390
Illinois	37,485	32,699	35,073	34,387
Indiana	31,123	30,734	31,758	31,750
Iowa	15,314	15,461	15,898	15,750
Kansas	15,068	14,954	14,201	16,644
Kentucky	22,061	21,722	20,311	20,547
Louisiana	31,448	33,660	35,006	36,727
Maine	8,339	9,580	11,470	11,965
Maryland	18,704	17,849	17,747	18,021
Massachusetts	32,693	32,511	34,707	36,951
Michigan	24,282	25,625	26,691	25,615
Minnesota	18,142	19,463	18,956	18,326
Mississippi	14,118	15,923	14,842	16,732
Missouri	18,543	19,532	18,358	19,344
Montana	9,366	11,334	6,999	6,548
Nebraska	12,007	12,356	12,004	13,324
Nevada	5,561	5,431	5,575	6,506
New Hampshire	4,762	5,246	5,765	7,539
New Jersey	40,323	40,122	45,606	43,194
New Mexico	7,103	8,513	9,704	10,632
New York	58,478	61,513	70,851	72,661
North Carolina	26,155	24,853	27,585	28,376
North Dakota	7,405	7,495	7,394	6,810
Ohio	35,888	36,069	35,814	33,555
Oklahoma	17,931	18,341	13,836	13,897
Oregon	15,728	15,429	14,889	16,207
Pennsylvania	54,048	53,042	53,529	57,419
Rhode Island	4,905	4,457	5,308	6,045
South Carolina	11,520	11,814	11,716	11,913
South Dakota	4,876	4,989	6,044	5,892
Tennessee	23,895	22,309	22,414	22,464
Texas	96,771	95,235	86,265	88,658
Utah	6,997	5,951	7,428	6,792
Vermont	3,709	4,182	3,943	4,355
Virginia	25,948	25,263	28,439	29,361
Washington	18,187	20,408	23,288	21,243
West Virginia	10,424	9,779	7,583	8,912
Wisconsin	21,867	22,516	21,825	21,033
Wyoming	7,321	7,697	6,864	8,787
TOTAL	1,041,217	1,046,827	1,063,740	1,086,413

Source: U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

U.S. DELIVERIES OF DISTILLATE FUEL OIL BY USES
(Thousands of Barrels)

Year	Heating Oils	Industrial Use	Oil Company Fuel	Electric Utility Company	Railroads	Vessel Bunkering	Military Use	Diesel	All Other	Total
1947	189,991	24,489	2,191	14,216	23,619	14,475	5,176	14,579	9,278	298,014
1948	213,558	29,932	3,625	14,856	31,006	14,511	9,071	15,971	9,443	341,973
1949	202,666	26,424	4,151	12,550	38,604	13,121	6,109	16,734	8,837	329,196
1950	235,740	37,121	5,692	13,207	48,703	12,872	6,553	21,333	14,085	395,306
1951	265,982	42,567	7,811	9,612	59,962	14,393	8,430	25,485	14,666	448,908
1952	279,326	42,760	7,976	8,350	68,002	17,213	9,644	30,551	15,388	479,210
1953	283,100	42,384	7,755	6,825	75,246	16,898	9,569	34,980	12,087	488,844
1954	320,117	41,589	7,699	6,070	77,389	15,563	8,752	38,809	10,257	526,245
1955	356,589	43,606	8,597	5,884	84,668	16,675	10,945	44,215	9,948	581,127
1956	377,262	44,949	10,131	5,403	89,439	18,487	11,326	48,870	9,908	615,775
1957	377,044	43,523	10,419	5,296	88,315	20,420	12,737	49,684	9,828	617,275
1958	412,670	37,553	7,815	5,382	83,719	18,768	13,412	65,186	9,054	653,559
1959(2)	415,521	33,380	8,642	5,005	87,802	19,250	11,394	70,527	7,471	658,992
1960(3)	438,010	34,271	8,347	4,742	86,490	18,730	10,793	74,562	7,380	683,325
1961	450,292	31,226	8,743	4,151	85,180	14,566	11,484	77,825	7,407	690,874
1962	466,830	34,951	9,055	4,100	86,803	15,836	13,041	89,729	8,750	729,095
1963	465,315	36,647	10,253	4,149	88,117	15,148	13,436	106,341	8,718	748,124
1964	451,860	36,007	10,576	3,849	88,198	16,001	13,609	117,534	9,917	747,551
1965	475,992	42,484	10,430	3,661	86,436	15,532	14,953	124,122	13,281	786,891
1966	472,778	47,108	10,485	3,612	89,104	16,642	16,303	135,776	17,905	809,713
1967	501,026	44,997	8,997	2,858	88,688	17,478	17,325	(1)	47,831	829,200
1968	510,682	45,795	9,975	8,509(4)	84,030	18,235	12,593	171,773	11,508	873,199
1969	511,768	42,456	13,867	12,158	86,429	18,877	13,958	188,253	12,534	900,300
1970	521,135	43,668	11,518	24,770	88,416	19,503	12,447	194,919	10,874	927,250
1971	522,475	50,731	14,088	35,329	86,251	20,959	17,427	213,906	10,154	971,320
1972	543,337	60,388	13,405	68,334	97,001	22,125	20,187	239,241	10,852	1,074,870
1973	536,856	67,306	14,902	77,950	102,828	26,786	19,598	276,961	11,876	1,135,063
1974	493,223	64,036	13,805	84,661	102,949	24,757	17,748	269,776	10,131	1,081,086

(1) Data not available
(2) Includes Alaska
(3) Includes Alaska and Hawaii
(4) Includes gas turbine plants in 1968 and subsequent years

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

U.S. DELIVERIES OF DISTILLATE FUEL OIL BY USES
(Thousands of Barrels)

Year	Heating Oils(5)(9)	Industrial Use(6)	Oil Company Fuel	Electric Utility Company(7)	Railroads	Vessels Bunkering	Military Use(8)	Diesel	All Other	Total
1975	488,388	63,993	13,633	63,420	92,191	26,138	18,004	266,883	10,096	1,043,746
1976	543,895	79,956	14,523	60,570	97,467	28,330	17,574	297,249	11,365	1,150,929
1977	538,845	96,502	19,954	76,681	99,306	33,512	20,121	330,864	14,394	1,230,179
1978	533,069	94,797	19,410	77,175	99,841	37,591	20,320	360,799	14,059	1,257,061
1979	454,955	99,583	22,043	46,579	103,493	41,725	18,570	392,614	34,812	1,214,374
1980	393,112	86,089	24,205	31,812	102,022	35,201	19,138	375,136	19,994	1,086,709
1981	345,728	80,216	29,185	18,192	100,482	41,025	17,763	378,853	21,032	1,032,476
1982	324,912	71,340	29,482	12,134	93,150	33,885	15,201	375,124	19,639	974,864
1983	339,455	54,030	21,510	11,744	76,230	39,108	15,804	408,594	15,541	981,926
1984	352,127	56,114	21,623	16,405	82,308	40,287	16,579	439,786	15,988	1,041,217
1985	358,129	61,730	20,869	12,246	76,422	45,102	18,290	411,420	4,198	1,046,827
1986	356,380	63,907	17,857	14,628	73,800	48,434	18,105	467,280	3,349	1,063,740
1987	355,899	69,467	20,994	15,383	74,944	52,935	21,057	473,930	1,805	1,086,413

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(5) Includes range oil
(6) Excludes oil company use
(7) Includes kerosine-type jet fuel: 1976 -- 11,600 bbls. per day; 1977 -- 18,770 bbls. per day; 1978 -- 12,342 bbls. per day.
(8) Includes imports by military
(9) Beginning in 1979, heating oils is no longer a separate category. The figure is derived by adding residential, commercial and farming.

Source: 1975-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1987 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

U.S. SALES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
AL	3,284	2,296	1,891	2,271	2,417	2,677	3,873	3,123	3,907	4,162	4,203	4,240	4,178	4,202
AK	--	--	--	--	--	--	--	--	--	--	--	--	574	695
AZ	3,491	1,841	1,087	1,448	1,157	542	206	45	61	35	21	37	34	95
AR	2,253	2,080	1,833	2,273	2,051	1,497	1,006	415	419	545	549	455	346	474
CA	90,916	79,081	77,171	78,397	85,884	79,127	85,870	79,973	83,959	84,421	79,245	72,232	72,287	78,774
CO	1,218	886	783	1,050	1,068	1,203	1,124	1,326	1,363	1,434	1,369	1,330	1,603	1,790
CT	8,838	10,066	14,515	16,845	14,888	13,475	14,377	12,897	13,108	13,219	12,712	17,041	15,814	14,450
DE	1,139	1,043	1,921	2,373	1,888	2,501	2,558	2,228	2,907	2,956	2,973	5,992	7,063	6,081
DC	935	855	1,427	1,188	1,688	1,915	2,035	1,963	2,152	2,106	2,501	2,243	2,450	2,387
FL	15,519	16,132	15,671	17,009	20,322	24,789	27,343	28,909	32,236	34,910	36,228	37,470	33,310	28,978
GA	2,933	3,375	4,227	4,733	5,619	5,816	6,573	5,590	6,118	5,955	6,128	7,145	6,824	6,413
HI	--	--	--	--	--	--	--	--	--	--	--	--	--	5,613
ID	460	456	480	629	945	1,029	1,067	1,115	1,421	1,256	1,185	210	185	201
IL	17,047	15,276	15,570	19,517	20,257	20,455	20,823	20,499	22,227	22,571	21,375	26,926	23,689	25,893
IN	12,386	13,497	13,343	15,841	16,850	17,230	17,679	14,234	14,588	15,206	14,753	11,955	13,035	12,885
IA	777	742	1,176	1,321	1,365	1,217	1,051	884	994	1,165	1,125	869	1,088	1,021
KS	11,224	10,166	8,226	5,893	7,110	6,071	5,247	4,020	4,179	3,827	3,586	1,420	1,943	2,249
KY	824	1,303	1,679	1,260	1,007	738	913	949	1,013	1,062	1,051	503	570	321
LA	14,835	19,434	15,220	11,221	10,953	10,422	9,929	9,710	10,601	10,804	11,359	13,411	10,764	8,599
ME	2,809	2,342	2,704	3,550	3,178	4,032	4,228	3,481	4,443	4,872	5,063	5,290	6,433	5,742
MD	17,119	13,276	13,521	14,168	15,814	14,852	15,323	14,031	15,466	15,770	15,364	14,974	17,385	16,490
MA	16,976	18,082	23,476	30,715	29,883	30,003	32,763	30,500	30,496	29,574	28,744	29,308	35,532	38,942
MI	7,046	11,051	11,403	12,708	13,743	14,153	14,809	14,675	15,387	16,008	15,330	9,340	13,498	11,242
MN	1,022	1,315	1,467	2,432	2,431	2,430	2,370	2,352	2,700	2,987	2,955	4,963	6,399	6,393
MS	343	411	314	348	257	173	163	160	179	219	232	268	435	339
MO	6,920	6,609	5,260	5,389	5,379	5,146	5,140	4,837	5,863	6,126	5,758	3,774	3,129	3,026
MT	5,444	4,935	3,702	4,222	4,958	4,220	3,276	1,751	1,692	1,646	1,554	1,643	2,006	2,002
NE	378	329	422	550	467	334	351	313	363	377	375	151	218	378
NV	5,957	4,372	1,514	2,889	2,685	2,266	2,048	1,353	1,359	383	269	195	146	202
NH	959	909	1,175	1,873	2,326	2,295	2,467	2,129	2,377	2,107	2,096	2,022	2,984	2,324
NJ	46,167	33,680	37,973	49,092	44,775	44,153	47,667	43,339	46,154	44,587	45,136	36,841	41,422	42,971
NM	840	685	460	696	532	831	696	262	283	505	438	359	107	173
NY	32,907	45,871	49,168	61,829	52,684	50,966	53,437	50,809	51,912	51,737	51,168	71,533	79,784	76,586
NC	433	461	560	990	1,109	1,257	1,439	1,809	2,377	2,558	2,467	3,034	3,908	4,537
ND	414	447	358	297	224	120	124	179	515	870	783	625	597	663
OH	16,534	16,089	16,779	18,004	18,017	17,670	18,698	18,118	18,915	19,206	18,530	9,721	11,028	11,382
OK	8,276	7,723	5,438	4,783	3,890	3,011	2,351	1,479	1,783	1,857	1,740	1,001	1,319	1,396
OR	15,482	14,892	12,845	12,429	12,215	13,168	11,186	9,776	10,152	9,401	7,181	5,253	5,121	5,453
PA	35,794	37,240	35,391	41,110	42,614	42,491	42,951	42,734	45,176	45,325	44,482	39,873	45,660	42,731
RI	7,088	7,917	8,508	10,891	10,030	9,756	10,993	9,473	11,215	11,303	11,114	11,127	10,350	9,502
SC	2,349	2,496	2,610	3,652	4,145	5,230	5,332	3,985	4,291	4,389	4,383	4,660	4,886	4,634
SD	257	288	262	294	231	239	232	165	176	211	217	100	48	60
TN	1,015	890	919	1,398	1,331	1,097	1,257	652	930	879	865	384	284	184
TX	66,789	63,376	48,481	48,560	50,464	46,508	41,978	36,312	38,108	37,883	37,859	29,082	25,275	22,102
UT	1,486	1,585	3,639	4,767	4,979	5,351	5,044	4,321	4,392	4,478	4,201	5,077	5,872	5,562
VT	262	258	281	382	300	300	475	409	424	402	380	455	275	498
VA	11,298	10,590	12,200	12,883	18,037	20,294	15,523	12,998	16,556	17,452	17,739	21,411	17,703	17,448
WA	14,149	13,304	12,043	13,715	14,644	17,025	14,328	14,978	16,405	16,975	11,795	8,747	9,162	9,179
WV	828	1,171	1,366	1,587	1,464	1,337	1,526	1,269	1,355	1,317	1,321	894	1,620	1,451
WI	1,358	1,497	1,515	1,712	1,861	2,042	2,118	2,109	2,168	2,290	2,201	3,458	4,167	4,275
WY	2,741	3,877	2,959	3,024	3,252	2,819	2,762	2,076	2,118	2,156	1,847	2,325	1,842	1,738
TOT	520,529	506,497	494,933	554,208	563,338	556,273	564,729	520,714	556,983	561,538	543,950	531,367	554,352	550,536

Source: Bureau of Mines, Mineral Industry Surveys, "Sales of Fuel Oil and Kerosine," Annual.

Section VII
Table 11a

U.S. SALES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
AL	3,555	2,749	3,184	2,274	2,459	2,752	2,835	2,773	3,392	3,283	2,601	3,170
AK	641	715	742	800	863	939	840	913	1,056	1,034	1,043	1,166
AZ	94	117	60	113	40	87	82	113	156	94	723	1,139
AR	379	566	864	750	406	359	495	654	501	1,584	2,887	3,183
CA	81,587	68,949	62,842	66,927	67,614	75,104	70,407	73,420	73,638	65,503	80,467	83,978
CO	2,465	2,497	2,572	2,617	1,961	1,700	1,327	1,529	2,103	1,531	1,572	1,984
CT	14,549	16,019	16,260	19,848	16,776	20,283	25,195	28,433	32,924	36,057	34,564	40,706
DE	4,986	4,775	4,707	4,473	5,317	5,293	3,844	4,357	5,893	6,581	6,194	9,640
DC	1,955	2,243	2,533	3,914	6,504	6,783	8,126	9,138	10,042	11,148	10,748	10,656
FL	32,600	37,044	36,668	39,425	43,093	41,884	38,605	40,543	44,523	55,169	62,414	76,325
GA	5,048	5,285	5,663	7,049	8,106	7,295	8,099	8,725	9,020	10,255	10,488	12,960
HI	6,646	6,716	6,940	7,539	7,673	8,266	8,724	9,730	9,997	10,162	10,631	11,316
ID	422	223	260	433	344	208	137	206	402	276	276	246
IL	25,750	24,756	25,582	21,411	22,220	21,151	23,410	24,136	25,456	28,618	23,708	29,581
IN	11,988	10,736	10,756	11,464	12,601	11,729	11,142	11,550	9,519	9,757	12,194	14,326
IA	1,032	873	931	1,034	513	866	490	441	393	408	411	325
KS	1,433	1,533	1,565	1,127	1,052	1,021	1,252	1,625	1,438	1,247	827	1,974
KY	278	389	460	559	576	696	891	850	1,043	1,061	674	1,159
LA	8,537	6,563	6,653	7,293	7,589	6,716	10,240	10,094	11,509	11,270	8,384	8,667
ME	6,366	5,985	5,332	7,546	6,442	8,077	8,121	8,590	9,467	11,693	18,331	21,365
MD	12,955	13,751	13,270	14,444	15,140	16,178	11,893	12,642	15,321	22,446	30,059	38,273
MA	40,242	41,852	37,693	43,320	53,294	60,234	66,460	68,586	73,572	86,063	82,917	87,930
MI	9,896	9,275	9,746	8,905	8,011	7,634	5,415	5,667	6,704	10,059	11,605	11,388
MN	5,524	6,307	6,102	5,671	4,827	4,740	3,647	3,952	5,165	5,150	4,075	6,943
MS	338	474	878	826	482	334	248	591	688	896	1,074	2,365
MO	2,638	2,131	2,335	2,400	3,252	2,623	3,371	3,379	3,640	3,615	2,904	2,552
MT	2,533	3,049	2,836	2,356	1,195	1,371	1,189	1,495	1,524	1,249	1,236	1,485
NE	419	626	1,133	958	310	382	527	605	731	798	597	706
NV	258	165	180	133	83	61	90	122	105	144	272	242
NH	2,067	2,545	2,524	2,588	2,408	3,911	3,612	2,993	4,434	5,514	6,016	5,961
NJ	42,990	50,422	50,539	50,135	42,445	50,461	63,810	67,583	73,697	80,840	75,213	80,761
NM	311	323	209	146	655	363	111	90	95	215	466	621
NY	83,518	89,667	88,606	84,596	102,974	115,903	128,294	132,907	136,327	152,487	159,609	164,123
NC	4,738	3,725	3,318	3,781	4,583	5,106	5,209	4,759	6,112	6,922	10,433	15,926
ND	552	524	553	678	834	685	536	607	548	726	645	781
OH	9,023	8,227	7,790	9,233	10,558	7,984	6,722	6,045	6,183	6,532	5,259	5,840
OK	873	967	797	825	795	637	776	866	683	744	637	1,355
OR	4,879	4,989	4,930	5,314	4,931	5,617	5,517	6,735	6,796	6,679	6,538	7,977
PA	38,970	41,422	42,245	43,636	42,430	47,160	44,348	47,013	52,489	60,389	59,973	58,490
RI	7,543	8,274	8,177	8,218	6,186	6,204	8,971	8,165	9,147	9,739	10,036	9,811
SC	5,031	5,908	5,833	5,050	3,762	3,971	3,225	3,812	4,138	5,328	5,493	6,395
SD	36	152	245	106	48	67	58	110	181	348	227	335
TN	171	105	275	287	276	331	465	334	786	596	365	523
TX	21,437	18,711	17,485	17,509	13,772	13,360	13,598	13,782	14,110	14,440	12,205	13,751
UT	5,654	6,048	5,790	5,502	5,500	5,738	5,348	5,617	6,030	4,657	5,030	4,538
VT	540	629	607	413	937	1,048	504	547	677	903	898	954
VA	14,195	13,225	14,055	15,516	16,179	14,797	14,925	14,701	22,701	33,236	40,565	44,530
WA	7,545	7,626	7,625	8,807	8,824	9,555	9,370	11,832	11,011	10,368	9,288	11,812
WV	1,216	1,480	1,572	2,297	2,087	2,527	2,117	1,984	1,976	2,064	1,906	1,748
WI	4,028	3,813	4,110	4,145	3,086	3,015	2,242	2,149	2,135	2,927	2,133	2,296
WY	2,555	3,288	2,490	2,241	2,105	1,866	2,733	1,994	2,351	1,482	1,233	1,369
TOT	542,986	548,433	538,522	556,632	574,118	613,972	639,539	669,484	722,629	804,287	838,044	925,647

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annual

U.S. DELIVERIES OF RESIDUAL FUEL OILS (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
AL	6,151	10,496	13,220	14,684	16,272	16,443	11,294	8,820	4,686	6,350	3,764	4,150
AK	1,051	1,098	1,104	1,342	1,738	2,595	321	397	249	301	60	67
AZ	4,288	6,943	5,182	4,108	7,478	3,413	5,032	1,046	227	297	616	562
AR	10,720	10,369	9,006	13,071	17,258	16,747	11,813	5,472	2,449	1,803	775	1,045
CA	121,059	105,314	113,782	136,080	180,436	140,595	160,428	162,365	126,463	81,392	62,534	67,319
CO	2,317	3,177	3,591	3,903	3,502	4,091	1,041	1,373	165	14	342	324
CT	43,180	38,546	32,395	32,665	32,183	36,325	27,241	28,209	21,951	21,349	35,676	32,541
DE	13,117	12,632	10,239	11,332	11,524	11,376	11,073	12,889	8,671	6,289	3,627	3,290
DC	11,200	7,437	4,239	3,802	4,989	2,235	767	444	389	1,527	918	857
FL	82,873	75,440	78,885	92,171	85,323	91,175	98,722	96,955	90,347	63,079	35,937	32,561
GA	13,888	13,454	9,831	12,257	12,666	11,998	13,368	8,512	6,251	5,562	5,013	4,489
HI	11,580	11,219	10,776	11,778	12,512	12,796	12,641	13,251	13,311	13,323	14,649	13,623
ID	243	597	703	803	697	1,003	580	460	55	223	113	107
IL	28,795	28,521	26,948	23,659	26,598	30,111	26,675	28,023	21,399	15,507	8,686	7,505
IN	15,536	16,078	14,052	19,188	19,447	19,004	16,271	14,335	7,638	4,856	3,262	2,862
IA	679	628	405	588	764	599	836	360	100	321	208	180
KS	2,847	2,660	5,945	6,416	6,307	6,686	4,830	1,046	697	993	1,832	1,580
KY	1,094	2,084	2,127	2,426	2,706	2,506	1,151	966	1,150	1,197	1,275	1,094
LA	16,952	25,466	28,393	38,317	52,527	54,252	63,359	72,686	55,687	48,260	44,187	49,625
ME	19,860	15,272	10,064	13,116	12,234	11,415	10,738	8,413	10,090	15,803	5,742	5,183
MD	42,534	39,310	25,538	27,330	26,122	28,217	23,851	16,090	12,396	11,898	11,958	10,795
MA	86,282	69,385	66,946	76,380	72,242	72,208	58,958	52,948	49,673	42,762	24,722	22,463
MI	14,560	14,876	18,739	20,656	21,345	24,871	18,547	11,934	8,947	4,285	3,823	3,290
MN	7,069	5,883	4,322	5,796	4,414	4,576	2,695	3,044	1,460	1,732	1,688	1,487
MS	3,955	7,436	9,752	13,881	20,507	23,308	24,740	17,459	9,725	5,570	2,381	2,375
MO	2,959	2,375	2,992	2,948	3,647	3,620	3,196	1,370	656	856	580	500
MT	1,705	2,290	2,186	2,549	2,414	2,665	4,188	3,012	2,519	1,668	1,418	1,349
NE	639	1,045	1,077	1,650	1,189	1,410	622	78	57	198	113	97
NV	612	690	1,456	649	1,455	2,756	1,541	2,503	250	119	90	80
NH	5,382	4,786	4,801	5,949	5,916	5,408	6,109	5,437	4,835	4,106	1,680	1,519
NJ	79,204	64,417	49,222	58,606	60,947	61,726	60,980	53,167	38,279	34,241	52,464	47,312
NM	1,220	1,714	1,632	1,582	1,503	1,081	596	1,305	856	716	3,576	4,823
NY	169,669	155,327	146,837	157,812	157,773	153,037	130,344	112,872	97,868	90,073	73,436	66,754
NC	15,393	13,819	7,786	12,667	14,499	12,814	11,889	9,114	5,677	5,971	6,297	5,680
ND	898	1,190	1,101	1,045	889	950	801	701	1,130	1,171	1,645	1,410
OH	6,866	8,330	9,957	11,041	14,491	13,431	9,674	6,282	5,920	2,488	4,346	3,742
OK	1,629	1,201	752	683	661	987	820	719	745	700	559	479
OR	7,439	6,650	4,484	3,606	3,395	5,087	5,526	4,562	6,407	10,927	4,607	4,893
PA	59,371	57,001	43,997	51,079	60,387	61,366	45,365	34,777	30,340	20,789	21,706	19,687
RI	8,376	6,316	4,600	4,631	4,678	4,088	2,387	2,230	2,227	1,791	1,060	958
SC	9,636	9,777	7,652	11,901	13,570	13,579	11,249	7,127	5,142	2,965	4,260	3,818
SD	234	137	153	299	260	213	166	115	161	51	147	126
TN	650	883	734	3,085	3,404	2,529	2,276	1,472	1,239	748	1,131	969
TX	29,208	36,891	41,072	44,195	52,178	63,634	73,206	73,189	68,671	62,069	45,725	49,104
UT	3,649	4,295	4,698	4,917	4,565	4,441	2,374	2,584	1,064	886	1,736	1,660
VT	876	535	818	1,285	1,136	1,073	337	471	351	372	345	312
VA	46,123	43,274	40,015	40,108	41,171	37,371	34,020	24,704	13,072	9,591	10,068	9,109
WA	10,986	10,365	8,627	7,675	9,683	12,647	13,893	17,332	16,505	14,029	5,358	5,153
WV	1,448	1,709	1,847	4,146	4,039	3,082	1,982	1,465	1,001	1,443	1,190	1,074
WI	2,633	1,787	1,872	2,627	2,759	2,613	1,915	1,751	871	2,212	876	834
WY	1,542	2,091	2,020	2,664	2,527	3,090	2,182	1,630	2,009	1,634	401	380
TOT	1,030,177	963,216	898,572	1,025,148	1,120,927	1,103,233	1,034,610	937,466	762,028	626,510	518,604	501,199

Source: 1973-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1984 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July 1985.

Section VII
Table 11c

U.S. DELIVERIES OF RESIDUAL FUEL OIL (ALL USES) BY STATE
(Thousands of Barrels)

STATE	1985	1986	1987
Alabama	3,773	9,243	10,910
Alaska	896	5,125	1,363
Arizona	10	29	15
Arkansas	2,545	6,437	2,690
California	59,892	62,987	60,082
Colorado	214	1,040	211
Connecticut	23,414	14,272	20,900
Delaware	1,342	2,195	3,818
Dist. of Col.	509	780	582
Florida	32,515	48,576	36,668
Georgia	8,859	2,229	2,199
Hawaii	13,728	13,307	12,587
Idaho	414	85	390
Illinois	4,899	7,358	7,106
Indiana	4,712	5,201	3,782
Iowa	225	614	126
Kansas	95	571	345
Kentucky	779	893	897
Louisiana	45,953	37,339	43,913
Maine	3,687	9,481	7,451
Maryland	6,562	6,465	7,919
Massachusetts	30,046	47,932	38,772
Michigan	3,298	4,214	3,002
Minnesota	1,225	2,170	1,271
Mississippi	1,466	12,820	2,613
Missouri	920	879	950
Montana	640	201	140
Nebraska	77	241	337
Nevada	39	442	376
New Hampshire	804	5,428	4,481
New Jersey	37,754	36,911	20,639
New Mexico	2,755	1,638	589
New York	50,622	66,353	68,697
North Carolina	4,537	4,180	4,484
North Dakota	635	468	381
Ohio	2,740	2,779	2,162
Oklahoma	264	466	348
Oregon	4,352	5,724	4,348
Pennsylvania	13,153	19,039	18,179
Rhode Island	1,222	2,515	1,917
South Carolina	2,275	1,753	1,676
South Dakota	44	71	57
Tennessee	675	702	337
Texas	43,173	37,177	36,230
Utah	1,951	1,494	2,185
Vermont	88	298	240
Virginia	8,206	8,309	9,490
Washington	8,643	16,489	11,229
West Virginia	702	750	382
Wisconsin	456	1,245	1,242
Wyoming	1,016	803	726
U.S. Total	438,840	517,717	461,504

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly, July issues.

U.S. SALES OF RESIDUAL FUEL OIL BY USES
(Thousands of Barrels)

Year	Vessels Bunkering	Gas and Electrical Public-Utility Power Plants	Railroads	Oil Company Use	Industrial Use (Excluding Oil Companies)	Heating Oils	Military Use	Miscel-laneous Uses	All Uses
1947	101,900	60,964	97,500	62,649	115,108	56,402	19,147	6,859	520,529
1948	95,763	56,812	89,588	56,637	117,780	58,639	24,655	6,623	506,497
1949	89,362	80,092	63,467	51,667	122,633	60,414	22,724	4,574	494,933
1950	92,947	93,062	60,878	53,263	148,111	72,716	28,333	4,898	554,208
1951	107,007	70,550	54,998	54,056	157,279	76,164	38,054	5,280	563,388
1952	110,412	70,497	40,489	54,421	158,373	79,151	37,185	5,745	556,273
1953	114,324	85,352	28,477	51,243	166,748	81,824	30,435	6,326	564,729
1954	108,790	70,749	16,122	52,165	160,121	78,845	26,887	7,035	520,714
1955	115,128	75,966	15,018	53,387	173,030	86,282	28,368	9,804	556,983
1956	117,445	73,962	10,575	53,271	177,807	87,601	30,546	10,331	561,538
1957	123,651	75,950	6,953	50,153	166,885	81,412	28,962	9,984	543,950
1958	106,269	76,995	5,772	46,463	143,142	105,639	37,428	9,659	531,367
1959(1)	102,049	82,208	5,613	46,177	167,701	111,850	31,415	7,339	554,352
1960(2)	94,084	85,408	5,610	45,061	157,270	125,088	31,724	6,291	550,536
1961	87,308	87,881	5,347	44,399	153,766	121,097	36,762	6,426	542,986
1962	84,415	88,261	5,501	45,978	156,221	125,164	35,667	7,226	548,433
1963	76,502	91,615	5,342	46,976	149,269	125,248	36,444	7,126	538,522
1964	83,024	97,595	5,350	43,098	157,178	126,215	35,568	8,606	556,632

(1) Includes Alaska
(2) Includes Hawaii

Source: U.S. Bureau of Mines, Sales of Fuel Oil and Kerosine, Annuals

Section VII
Table 12a

U.S. DELIVERIES OF RESIDUAL FUEL OIL BY USES
(Thousands of Barrels)

Year	Vessels Bunkering	Gas and Electrical Public-Utility Power Plants(1)	Railroads	Oil Company Use	Industrial Use (Excluding Oil Companies)	Heating Oils(3)	Military Use(2)	Miscel-laneous Uses	All Uses
1965	73,639	114,884	4,001	34,354	140,602	156,254	40,380	10,004	574,118
1966	63,641	140,642	3,792	35,177	141,050	167,471	41,861	10,338	613,972
1967	80,680	158,417	5,494	37,880	131,819	175,990	40,465	8,794	639,539
1968	87,575	184,956	4,296	39,329	135,664	174,326	34,990	8,348	669,484
1969	85,581	247,634	3,381	36,559	130,654	178,095	31,750	8,875	722,529
1970	89,850	312,420	2,222	38,318	139,647	185,831	28,704	7,295	804,287
1971	78,727	371,820	1,262	32,626	136,221	182,062	29,217	6,109	838,044
1972	77,932	435,348	1,137	44,291	142,320	191,111	24,622	8,886	925,647
1973	92,415	509,457	1,214	50,652	152,267	192,252	22,892	9,028	1,030,177
1974	91,052	475,204	1,176	50,236	143,726	172,896	20,423	8,503	963,216
1975	96,673	454,935	583	50,487	116,657	154,103	19,068	6,066	898,572
1976	117,458	492,974	423	58,212	153,596	178,139	18,561	5,785	1,025,148
1977	128,966	569,429	329	60,582	171,967	168,279	16,646	4,729	1,120,927
1978	157,495	533,193	206	57,690	169,403	164,536	16,583	4,127	1,103,233
1979	190,543	486,636	245	51,062	198,759	82,729(3)	7,738	16,900	1,034,610
1980	213,131	390,105	665	59,519	163,564	98,034	8,066	4,382	937,466
1981	188,632	325,486	178	51,870	117,024	67,035	7,008	4,795	762,030
1982	152,586	227,419	170	45,319	122,619	65,781	7,829	4,784	626,510
1983	136,290	204,238	47	28,604	93,624	35,979	5,411	14,412	518,604
1984	135,408	186,318	43	27,680	94,375	33,777	5,291	18,307	501,199
1985	130,323	147,238	148	18,477	95,509	31,592	4,593	10,962	438,840
1986	125,889	215,276	14	18,239	106,962	39,595	4,308	7,434	517,717
1987	125,221	181,712	7	11,967	90,723	42,013	4,549	5,314	461,504

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(1) Beginning with 1967, represented use by electric public-utility plants only.
(2) Includes imports by military.
(3) Beginning in 1979, heating oil has been reclassified commercial and is a part of the total called "heating and industrial."

Source: 1965-1978 -- U.S. Energy Information Administration, Sales of Fuel Oil and Kerosine, Annual Reports.
1979-1982 -- U.S. Energy Information Administration, Petroleum Supply Annuals.
1983-1987 -- U.S. Energy Information Administration, Petroleum Marketing Monthly, July issues.

Section VII
Table 13

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--NAPHTHA TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand (2)
1965(1)	226	44	270	8,338	--	270	2	268
1966	245	35	280	7,235	-3	283	4	279
1967	300	15	315	9,037	+5	310	5	305
1968	332	19	351	8,904	--	351	5	346
1969	287	14	301	8,556	-1	302	5	297
1970	320	20	250	6,621	-5	255	6	249
1971	234	30	264	6,990	+1	263	3	260
1972	209	33	242	6,147	-2	244	2	242
1973	181	36	217	5,599	-2	219	2	217
1974	195	27	222	5,529	--	222	--	222
1975	180	28	208	5,222	-1	209	--	209
1976	187	15	202	6,495	+3	199	--	199
1977	186	21	207	6,285	-1	208	--	208
1978	179	19	198	5,958	-1	199	--	199
1979	176	22	198	5,599	-1	200	--	200
1980	188	31	219	6,308	+2	217	--	217
1981	193	7	200	7,054	+2	198	1	198
1982	201	5	206	5,667	-4	210	1	209
1983	205	1	206	6,265	-2	208	1	207
1984	213	14	227	6,861	+2	225	3	223
1985	206	9	215	6,654				
Jan.	185	19	204	6,415	-1	216	1	214
Feb.	195	9	204	6,183	-14	218	1	218
Mar.	189	17	206	6,767	-8	212	0	212
Apr.	222	3	225	6,205	+19	187	0	187
May	230	6	236	6,428	-19	244	0	244
Jun.	211	15	226	6,227	+7	229	0	228
Jul.	224	8	232	6,977	-7	233	0	232
Aug.	209	3	212	6,982	+24	208	0	207
Sep.	206	0	206	6,857	--	212	2	211
Oct.	203	13	216	6,738	-4	210	2	208
Nov.	209	9	218	6,793	-4	220	3	217
Dec.	189	2	191	6,654	+2	216	6	211
					-4	195	3	192

(1) Data prior to 1965 ar not available on a comparable basis.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1985 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 13a

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--NAPHTHA TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand(2)
1986	196	9	205	7,072				
Jan.	193	2	195	6,534	+1	204	1	202
Feb.	173	2	175	6,264	-4	199	0	200
Mar.	172	5	177	5,795	-10	185	1	183
Apr.	201	5	206	6,712	-15	192	1	191
May	197	15	212	6,513	+31	175	5	171
Jun.	209	9	218	6,581	-6	218	0	218
Jul.	203	16	219	6,099	+2	216	0	215
Aug.	197	8	205	6,609	-16	235	0	235
Sep.	197	6	203	6,70[illegible]	+16	189	1	188
Oct.	202	7	209	6,764	+3	200	0	199
Nov.	202	11	213	6,901	+2	207	0	207
Dec.	203	21	224	7,072	+5	208	0	209
					+6	218	10	209
1987	204	3	207	7,956				
Jan.	174	6	180	7,631	+2	205	1	204
Feb.	194	3	197	7,141	+18	162	2	159
Mar.	187	6	193	7,031	-18	214	0	214
Apr.	202	3	205	7,183	-4	197	1	196
May	216	2	218	8,078	+5	200	0	199
Jun.	204	2	206	7,262	+29	189	0	189
Jul.	221	3	224	7,253	-27	233	0	233
Aug.	208	3	211	6,981	--	224	0	224
Sep.	204	2	206	6,506	-9	220	2	218
Oct.	219	4	223	7,097	-16	222	1	221
Nov.	217	4	221	7,043	+ 1	203	0	203
Dec.	206	2	208	7,956	- 2	223	2	221
					+29	179	4	175
1988	206	3	209	6,051				
Jan.	185	3	188	7,572	- 5	214	1	213
Feb.	178	3	181	6,086	-12	199	0	199
Mar.	211	2	213	6,639	-51	232	0	232
Apr.	203	3	206	6,276	+18	195	0	195
May	229	4	233	6,853	-12	218	0	218
Jun.	208	3	211	6,741	+19	214	3	211
Jul.	209	3	212	6,749	-4	215	0	215
Aug.	206	3	209	6,893	0	212	0	212
Sep.	198	3	201	6,503	+ 5	205	1	204
Oct.	208	3	211	6,316	-13	214	7	207
Nov.	219	3	222	6,436	- 6	216	2	214
Dec.	217	3	220	6,051	+ 4	218	0	218
					-12	233	3	230

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 13b

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--NAPHTHA TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand(2)
1989								
Jan.	191	3	194	6,624	+18	175	1	174
Feb.	190	2	192	6,379	-9	201	1	200
Mar.	209	4	213	6,118	-8	221	10	211

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthlies.

Section VII
Table 14

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--KEROSINE TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1965(1)	298	37	335	10,361	--	335	1	334
1966	345	52	397	13,139	+ 5	392	1	391
1967	448	74	522	13,174	+ 3	519	1	518
1968	529	86	615	15,373	+ 6	609	--	609
1969	594	111	705	19,517	+11	694	--	694
1970	597	125	722	29,989	+ 4	718	--	718
1971	601	150	751	20,747	- 1	752	1	751
1972	638	162	800	19,346	- 3	803	--	803
1973	679	176	855	22,945	+10	845	3	842
1974	641	135	776	23,906	+ 3	773	2	771
1975	691	105	796	25,158	+ 3	793	2	791
1976	731	61	792	25,590	+ 1	791	2	789
1977	788	53	841	28,263	+ 8	833	2	831
1978	791	67	858	27,707	- 1	859	1	858
1979	835	56	891	32,921	+14	877	1	876
1980	811	49	860	35,723	+ 8	852	1	851
1981	775	31	806	34,011	- 5	811	1	809
1982	778	23	801	31,180	- 8	809	5	804
1983	817	29	846	32,346	+ 2	844	5	839
1984	919	48	967	35,118	+ 8	959	7	953
Jan.	870	51	921	29,234	-100	1,021	10	1,011
Feb.	938	110	1,048	32,929	+127	921	2	919
Mar.	893	38	931	33,917	+32	899	1	898
Apr.	871	42	913	34,056	+5	908	5	903
May	890	29	919	34,488	+14	905	1	905
Jun.	916	36	952	36,089	+52	899	6	892
Jul.	946	40	988	36,780	+22	966	10	956
Aug.	973	77	1,050	38,526	+56	994	2	992
Sep.	926	33	959	37,989	-18	977	1	977
Oct.	958	56	1,014	38,214	+7	1,007	5	1,002
Nov.	920	22	942	38,401	+6	936	11	924
Dec.	931	38	969	35,118	-106	1,075	24	1,051
1985	983	30	1,013	33,825	-4	1,017	12	1,005
Jan.	958	49	1,007	34,691	-14	1,021	3	1,018
Feb.	981	29	1,010	35,302	+22	988	22	966
Mar.	1,003	30	1,033	36,865	+50	983	6	976
Apr.	937	14	951	35,041	-61	1,012	5	1,007
May	915	24	939	35,924	+28	911	5	906
Jun.	914	20	934	36,537	+20	914	3	910
Jul.	954	43	997	36,037	-16	1,013	3	1,009
Aug.	966	9	975	34,681	-44	1,019	21	998
Sep.	989	34	1,023	35,187	+17	1,006	4	1,002
Oct.	1,036	42	1,078	35,558	+12	1,066	25	1,042
Nov.	1,090	32	1,122	36,408	+28	1,094	28	1,066
Dec.	1,051	35	1,086	33,825	-83	1,169	18	1,152

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(1) Data prior to 1965 are not available on a comparable basis.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1985 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 14a

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--KEROSINE TYPE
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks at month-end (Thousands of Barrels)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1986	1,097	48	1,145	42,677	+24	1,121	16	1,105
Jan.	1,143	25	1,168	35,051	+40	1,128	38	1,090
Feb.	1,175	33	1,208	37,829	+99	1,109	15	1,093
Mar.	1,119	24	1,143	41,729	+126	1,017	11	1,007
Apr.	963	39	1,002	38,831	-97	1,099	12	1,086
May	1,004	39	1,043	38,807	-1	1,044	14	1,030
Jun.	1,066	76	1,142	39,703	+30	1,112	6	1,106
Jul.	1,084	106	1,190	42,481	+90	1,100	10	1,091
Aug.	1,072	77	1,149	41,884	-19	1,168	4	1,164
Sep.	1,093	54	1,147	42,233	+12	1,135	14	1,122
Oct.	1,112	31	1,143	43,853	+52	1,091	25	1,066
Nov.	1,125	48	1,173	43,237	-21	1,194	22	1,171
Dec.	1,210	28	1,238	42,677	-18	1,256	20	1,236
1987	1,138	64	1,202	41,973	-2	1,204	23	1,181
Jan.	1,192	37	1,229	42,116	-18	1,247	45	1,202
Feb.	1,135	64	1,199	41,154	-34	1,233	20	1,213
Mar.	1,095	77	1,172	41,044	-4	1,176	7	1,169
Apr.	1,052	62	1,114	39,977	-36	1,150	4	1,146
May	1,035	65	1,100	39,277	-23	1,123	4	1,118
Jun.	1,048	64	1,112	38,677	-20	1,132	5	1,127
Jul.	1,126	70	1,196	39,479	+26	1,170	4	1,165
Aug.	1,191	52	1,243	40,762	+41	1,202	2	1,199
Sep.	1,190	81	1,271	43,684	+97	1,174	34	1,139
Oct.	1,189	79	1,268	42,740	-30	1,298	35	1,264
Nov.	1,171	51	1,222	43,937	+40	1,182	45	1,138
Dec.	1,233	65	1,298	41,973	-63	1,361	74	1,288
1988	1,164	87	1,251	37,723	- 12	1,263	27	1,236
Jan.	1,231	82	1,313	37,976	-129	1,441	81	1,360
Feb.	1,205	68	1,273	36,738	-43	1,315	34	1,281
Mar.	1,242	95	1,337	39,527	+90	1,247	52	1,195
Apr.	1,088	81	1,169	39,020	-17	1,186	13	1,173
May	1,059	108	1,167	39,210	+6	1,161	4	1,157
Jun.	1,133	75	1,208	38,811	-13	1,221	15	1,206
Jul.	1,154	85	1,239	40,148	+43	1,196	3	1,193
Aug.	1,138	100	1,238	39,746	-13	1,251	14	1,237
Sep.	1,177	59	1,236	40,060	+10	1,225	9	1,216
Oct.	1,158	143	1,301	47,755	+22	1,279	2	1,277
Nov.	1,118	76	1,194	39,668	-36	1,230	9	1,221
Dec.	1,259	72	1,331	37,723	-63	1,394	80	1,314

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR JET FUEL--KEROSINE TYPE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand(1)
1989								
Jan.	1,312	82	1,394	37,863	+6	1,388	74	1,315
Feb.	1,216	117	1,333	37,368	-18	1,351	20	1,330
Mar.	1,188	96	1,284	37,856	-16	1,268	1	1,267

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	302	--	302	17,722	+ 1	301	20	281
1948	333	--	333	23,941	+17	316	9	307
1949	280	--	280	20,888	- 8	288	7	281
1950	325	--	325	19,723	- 3	328	5	323
1951	372	--	372	27,088	+16	356	19	337
1952	351	--	351	26,529	- 1	352	21	331
1953	337	--	337	28,684	+ 4	333	19	314
1954	335	--	335	27,826	- 2	337	13	324
1955	326	--	326	26,770	- 3	329	9	320
1956	342	--	342	31,420	+12	330	9	321
1957	303	--	303	29,200	- 6	309	14	295
1958	305	--	305	26,040	- 8	313	3	310
1959(1)	305	--	305	26,856	+ 1	304	3	301
1960(2)	374	--	374	31,445	+10	364	2	362
1961	391	8	399	32,433	+ 3	396	1	395
1962	431	18	449	31,725	- 2	451	1	450
1963	454	24	478	34,102	+ 4	474	2	472
1964	463	31	494	36,165	+ 6	488	--	488
1965(3)	259	--	259	24,080	- 9	268	1	267
1966	279	1	280	25,004	+ 2	278	1	277
1967(4)	274	--	274	25,366	--	274	--	274
1968	278	--	278	23,480	- 5	283	2	281
1969	282	3	285	26,780	+ 9	276	1	275
1970	262	4	266	27,848	+ 3	263	--	263
1971	240	1	241	24,438	- 9	250	1	249
1972	219	1	220	19,111	-16	236	--	236
1973	220	2	222	21,022	+ 6	216	--	216
1974	156	5	161	15,269	-15	176	--	176

(1) These figures and those for subsequent years are on a 50 state basis.
(2) These figures and those through 1964 include commercial jet fuel.
(3) These figures and those for subsequent years exclude kerosine-type jet fuel.
(4) Beginning with 1967 production at refineries and at plants are combined in one total.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

Section VII
Table 15a

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1975	152	3	155	15,571	- 4	159	--	159
1976	152	9	161	12,514	- 8	169	--	169
1977	171	19	190	18,056	+15	175	--	175
1978	154	11	165	14,330	-10	175	--	175
1979	183	9	192	15,824	+ 4	189	--	189
1980	137	10	147	11,570	-12	159	--	159
1981	119	7	126	11,042	- 1	127	--	127
1982	115	13	128	11,420	- 2	130	1	129
1983	110	11	121	[illegible],861	- 8	129	1	127
1984	114	12	126	11,893	+11	115	--	115
1985	94	8	102	7,502	-12	114	--	114
Jan.	100	10	110	7,905	-129	239	--	239
Feb.	135	12	147	7,124	-28	175	--	175
Mar.	97	4	101	8,095	+31	70	--	70
Apr.	69	0	69	7,926	-6	75	--	74
May	43	2	45	7,326	-19	64	--	64
Jun.	59	5	64	6,794	-18	82	--	81
Jul.	77	1	78	7,596	+26	52	--	52
Aug.	91	9	100	7,951	+11	89	--	89
Sep.	102	0	102	8,701	+25	77	--	76
Oct.	117	11	128	9,648	+31	97	--	97
Nov.	115	16	131	10,489	+28	103	1	102
Dec.	131	23	154	7,502	-96	250	--	250
1986	89	13	102	8,379	+2	100	2	98
Jan.	135	29	164	7,272	-7	171	1	170
Feb.	120	1	121	6,735	-19	140	--	140
Mar.	96	11	107	6,179	-18	126	--	125
Apr.	76	0	76	6,837	+22	54	1	54
May	47	2	49	6,258	-19	68	0	68
Jun.	45	0	45	6,652	+13	32	1	30
Jul.	62	7	69	6,881	+7	62	0	62
Aug.	73	26	99	6,859	-1	100	0	99
Sep.	91	16	107	8,344	+50	57	1	57
Oct.	91	14	105	8,277	-2	103	8	100
Nov.	107	19	126	8,502	+8	118	0	118
Dec.	131	30	161	8,379	-4	165	8	157

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1986 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR KEROSINE
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1987	79	17	96	8,447	--	96	1	95
Jan.	128	33	161	8,515	+4	157	0	157
Feb.	79	36	115	7,578	-33	148	0	148
Mar.	61	9	70	6,523	-34	104	0	105
Apr.	46	9	55	6,851	+11	44	0	43
May	38	3	41	6,617	-8	49	0	48
Jun.	38	4	42	6,089	-18	60	0	60
Jul.	53	12	65	6,512	+14	51	0	51
Aug.	66	18	84	7,055	+18	66	1	65
Sep.	90	13	103	7,989	+31	72	0	72
Oct.	118	30	148	8,719	+24	125	0	125
Nov.	117	12	129	9,270	+18	111	1	110
Dec.	107	29	136	8,447	-27	163	10	153
1988	79	16	95	7,284	- 3	97	1	96
Jan.	104	33	137	7,193	-40	177	0	177
Feb.	118	20	138	6,963	-8	145	4	141
Mar.	68	14	82	6,363	-19	102	1	101
Apr.	50	8	58	6,033	-11	68	0	68
May	48	2	50	5,471	-18	68	0	68
Jun.	55	9	64	5,970	+17	47	0	47
Jul.	64	0	64	6,211	+8	56	0	56
Aug.	81	8	89	7,168	+31	57	0	57
Sep.	80	13	93	7,476	+10	82	1	81
Oct.	80	28	108	8,030	+18	89	2	87
Nov.	99	23	122	8,138	+ 4	119	2	117
Dec.	100	29	129	7,284	-28	156	2	154
1989								
Jan.	110	34	144	7,344	+2	142	1	140
Feb.	70	5	75	5,871	-53	128	0	127
Mar.	76	3	79	5,742	-4	83	0	83

(1) Total may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports(1)	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	413	--	413	4,295	- 2	415	17	398
1948	464	--	464	6,172	+ 3	461	14	447
1949	494	--	494	7,358	+ 2	491	15	476
1950	578	--	578	8,012	+ 2	576	7	569
1951	651	--	651	8,854	+ 2	649	10	639
1952	695	--	695	8,445	- 1	696	11	685
1953	745	--	745	11,220	+ 8	737	11	726
1954	785	--	785	14,979	+11	774	12	762
1955	890	--	890	14,596	- 1	891	12	879
1956	942	--	942	21,952	+20	922	12	910
1957	954	--	954	23,480	+ 4	950	13	937
1958	965	--	965	24,959	+ 8	957	8	949
1959(2)	1,067	--	1,067	27,407	+ 7	1,060	5	1,055
1960	1,141	5	1,146	32,554	+14	1,132	8	1,124
1961	1,207	5	1,212	43,365	+29	1,183	10	1,173
1962	1,232	6	1,238	36,154	-20	1,258	11	1,247
1963	1,359	7	1,366	37,633	+ 4	1,362	12	1,350
1964	1,446	11	1,457	39,371	+ 5	1,452	15	1,437
1965	1,502	21	1,523	39,542	--	1,523	22	1,501
1966	1,575	29	1,604	43,759	+12	1,592	24	1,568
1967	1,715	27	1,742	69,947	+74	1,668	25	1,643
1968	1,826	32	1,858	81,086	+32	1,826	29	1,797
1969	1,928	35	1,963	65,306	-45	2,008	35	1,973
1970	2,005	52	2,057	74,089	+25	2,032	27	2,005
1971	2,050	106	2,156	100,889	+73	2,083	26	2,057
1972	2,100	174	2,274	91,792	-25	2,299	31	2,268
1973	2,113	239	2,352	106,476	+41	2,311	27	2,284
1974	2,026	211	2,237	120,092	+37	2,200	25	2,175

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(1) Prior to 1960 figures included with gasoline.
(2) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

TOTAL U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES

(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(2)	Exports	Domestic Demand(3)
1975	1,944	185	2,129	132,653	+34	2,095	26	2,069
1976	1,944	197	2,141	124,518	-22	2,163	25	2,138
1977	1,970	203	2,173	144,902	+56	2,117	18	2,099
1978	1,921	139	2,060	140,052	-42	2,101	20	2,081
1979	1,924	230	2,154	125,289	-40	2,187	15	2,172
1980	1,897	216	2,113	137,551	+34	2,079	21	2,058
1981	1,905	254	2,159	150,170	+11(1)	2,148	42	2,106
1982	1,809	247	2,056	105,077	-124	2,180	65	2,115
1983	1,875	205	2,080	116,532	+470	1,610	73	1,537
1984	1,989	241	2,230	108,446	- 22	1,752	51	1,702
1985	1,986	235	2,221	81,707	-73	1,785	64	1,721
Jan.	1,948	284	2,232	96,294	-424	2,127	72	2,055
Feb.	1,967	253	2,220	86,644	-309	2,005	74	1,931
Mar.	1,956	269	2,225	86,001	+21	1,752	52	1,700
Apr.	1,976	172	2,148	90,221	+141	1,538	80	1,458
May	1,995	221	2,216	96,365	+198	1,562	40	1,522
Jun.	2,016	250	2,266	101,922	+185	1,617	53	1,564
Jul.	2,001	190	2,191	105,910	+129	1,607	70	1,537
Aug.	2,000	182	2,182	108,896	+96	1,594	82	1,512
Sep.	1,954	188	2,142	106,667	-74	1,691	29	1,662
Oct.	1,950	271	2,221	97,102	-309	1,970	47	1,923
Nov.	2,001	220	2,221	91,816	-176	1,802	93	1,709
Dec.	2,063	322	2,385	81,707	-326	2,165	77	2,088
1986	1,963	265	2,228	109,532	+76	1,673	45	1,629
Jan.	2,128	303	2,431	78,770	-95	1,995	47	1,948
Feb.	2,094	224	2,318	76,170	-93	1,915	80	1,834
Mar.	1,965	220	2,185	78,231	+66	1,689	51	1,638
Apr.	1,904	156	2,060	84,220	+200	1,418	36	1,383
May	1,962	221	2,183	95,798	+373	1,362	43	1,320
Jun.	1,919	302	2,221	111,458	+522	1,296	25	1,271
Jul.	1,961	315	2,276	126,110	+473	1,435	53	1,382
Aug.	1,889	281	2,170	134,938	+285	1,458	56	1,402
Sep.	1,901	314	2,215	138,796	+129	1,609	29	1,581
Oct.	1,888	276	2,164	131,785	-226	1,889	26	1,864
Nov.	1,985	322	2,307	122,639	-305	2,018	58	1,958
Dec.	1,976	238	2,214	109,532	-423	2,008	35	1,972

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(1) The U.S. Department of Energy altered its stock reporting base as of January 1981. On the new basis, year-end 1980 stocks were 146,145 thousand barrels. This figure was used to compute the 1981 stock change.
(2) Total demand excludes volume used as refinery inputs.
(3) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals.

TOTAL U.S. SUPPLY AND DEMAND FOR NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(2)
1987	2,040	201	2,241	104,119	-15	1,789	40	1,749
Jan.	2,014	203	2,217	94,979	-502	2,143	46	2,097
Feb.	2,035	215	2,250	88,728	-188	1,948	40	1,908
Mar.	2,037	145	2,182	88,569	-5	1,756	54	1,701
Apr.	2,049	170	2,219	92,705	+138	1,658	39	1,619
May	2,023	147	2,170	101,697	+297	1,444	36	1,408
Jun.	2,035	131	2,166	107,974	+203	1,559	22	1,537
Jul.	2,070	201	2,271	112,761	+154	1,693	32	1,661
Aug.	2,020	199	2,219	120,211	+240	1,548	35	1,513
Sep.	2,034	289	2,323	122,768	+ 85	1,812	58	1,754
Oct.	2,040	241	2,281	120,373	- 77	1,889	23	1,866
Nov.	2,067	243	2,310	116,176	-140	1,927	37	1,890
Dec.	2,051	227	2,278	104,119	-389	2,106	59	2,047
1988	2,120	221	2,341	103,988	-	1,831	51	1,780
Jan.	2,034	237	2,271	85,937	-587	2,291	47	2,244
Feb.	2,067	270	2,337	76,632	-321	2,101	49	2,052
Mar.	2,124	176	2,300	75,802	-27	1,834	38	1,796
Apr.	2,105	216	2,321	87,564	+392	1,478	45	1,433
May	2,119	174	2,293	98,374	+349	1,480	39	1,441
Jun.	2,119	152	2,271	108,996	+354	1,476	40	1,436
Jul.	2,154	234	2,388	121,221	+394	1,560	37	1,523
Aug.	2,161	261	2,422	130,287	+292	1,657	52	1,605
Sep.	2,146	200	2,346	131,040	+25	1,869	45	1,824
Oct.	2,172	227	2,399	128,859	-70	1,965	58	1,907
Nov.	2,134	279	2,413	121,239	-254	2,021	75	1,946
Dec.	2,103	225	2,328	103,988	-556	2,236	87	2,149
1989								
Jan.	2,179	241	2,420	92,871	-412	2,219	29	2,190
Feb.	2,096	278	2,374	83,561	-333	2,182	38	2,144
Mar.	2,204	158	2,362	81,275	-74	1,970	49	1,921

(1) Total demand excludes volume used as refinery inputs.
(2) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

Section VII
Table 17

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand	Exports	Domestic Demand
1947	141	--	141	8,624	+ 2	139	41	98
1948	140	--	140	9,843	+ 5	135	37	98
1949	124	--	124	9,219	- 2	126	35	91
1950	141	--	141	7,849	- 4	145	39	106
1951	168	--	168	9,617	+ 4	164	48	116
1952	151	--	151	11,021	+ 3	148	44	104
1953	144	--	144	10,070	- 2	146	35	111
1954	145	--	145	9,702	- 1	146	41	105
1955	153	--	153	8,763	- 3	156	39	117
1956	161	--	161	10,183	+ 3	158	38	120
1957	152	--	152	10,864	+ 1	151	38	113
1958	140	--	140	9,687	- 3	143	35	108
1959(1)	154	--	154	8,950	- 2	156	38	118
1960	162	--	162	9,874	+ 2	160	43	117
1961	162	--	162	12,943	+ 2	160	47	113
1962	168	--	168	13,130	--	168	48	120
1963	173	--	173	14,321	+ 3	170	50	120
1964	174	--	174	14,062	- 1	175	50	125
1965	172	--	172	13,304	- 2	174	45	129
1966	179	--	179	12,682	- 2	181	47	134
1967	178	--	178	14,774	+ 6	172	51	121
1968	180	--	180	14,023	- 2	182	49	133
1969	178	1	179	14,088	--	179	45	134
1970	181	1	182	14,712	+ 2	180	44	136
1971	179	--	179	15,049	+ 1	178	43	135
1972	179	1	180	13,271	- 5	185	41	144
1973	188	6	194	12,186	- 3	197	35	162
1974	194	5	199	16,060	+11	188	33	155

(1) These figures and those for subsequent years are on a 50 state basis.

Source: U.S. Bureau of Mines, Petroleum Statement, Annual and December issues.

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks as of Dec. 31 (thousands of barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1975	154	3	157	14,337	-5	162	25	137
1976	169	4	173	12,274	-5	178	26	152
1977	177	9	186	12,095	0	186	26	160
1978	190	8	198	12,233	-	198	27	171
1979	194	9	203	12,549	+1	202	23	179
1980	178	7	185	13,483	+3	182	23	160
1981	166	8	174	14,304	+2	172	19	153
1982	141	10	151	12,531	-5	156	16	140
1983	147	11	158	12,080	-3	162	16	146
1984	159	13	172	12,724	+2	170	15	156
1985	145	13	158	11,827	-2	160	15	145
Jan.	145	12	157	12,931	+7	150	14	136
Feb.	149	18	167	12,700	-8	175	12	163
Mar.	147	11	158	12,462	-8	166	16	151
Apr.	149	9	158	11,937	-18	176	13	162
May	153	20	173	11,938	+2	173	14	159
Jun.	156	14	170	12,203	+9	161	9	151
Jul.	149	10	159	12,469	+9	150	13	138
Aug.	152	16	168	12,220	-8	176	17	160
Sep.	154	6	160	12,456	+8	152	15	138
Oct.	150	15	165	12,165	-9	174	20	154
Nov.	114	12	126	11,556	-20	146	21	125
Dec.	126	9	135	11,827	+9	126	17	109
1986	159	12	171	14,164	+6	165	23	142
Jan.	161	16	177	14,431	+84	93	19	74
Feb.	168	11	179	14,916	+17	162	20	141
Mar.	145	12	157	14,029	-29	186	21	165
Apr.	162	19	181	14,060	+1	180	21	159
May	173	14	187	13,982	-3	190	21	169
Jun.	160	9	169	13,586	-13	182	17	166
Jul.	145	14	159	13,255	-11	170	27	142
Aug.	161	5	166	13,279	+1	165	23	141
Sep.	163	10	173	13,015	-9	182	21	161
Oct.	154	14	168	12,511	-16	184	30	154
Nov.	167	14	181	13,282	+26	155	25	130
Dec.	155	4	159	14,164	+28	131	25	126

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1986 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VII
Table 17b

TOTAL U.S. SUPPLY AND DEMAND FOR LUBRICANTS
(Daily Averages in Thousands of Barrels)

	Supply				Demand			
Year	Production	Imports	New Supply	Stocks at month-end (Thousands of Barrels)	Change in Stocks	Total Demand(1)	Exports	Domestic Demand(1)
1987	167	14	181	13,271	- 2	184	23	161
Jan.	163	13	176	14,249	+3	173	17	156
Feb.	158	16	174	13,691	-20	194	25	168
Mar.	161	12	173	12,953	-24	197	24	173
Apr.	172	14	186	12,455	-17	203	22	180
May	159	9	168	12,122	-11	180	25	154
Jun.	176	17	193	11,675	-15	208	24	184
Jul.	171	23	194	11,705	+1	193	28	165
Aug.	168	13	181	11,900	+ 6	175	22	153
Sep.	171	16	187	12,169	+9	178	21	157
Oct.	173	12	185	12,620	+15	170	21	150
Nov.	173	14	187	13,648	+34	153	22	130
Dec.	156	13	169	13,271	-12	181	22	160
1988	170	11	181	13,316	-	181	26	155
Jan.	164	13	177	14,060	+25	151	19	132
Feb.	174	14	188	13,905	-5	193	23	170
Mar.	188	13	201	14,040	+4	196	26	170
Apr.	178	12	190	14,095	+2	188	34	154
May	180	13	193	13,879	-7	200	25	175
Jun.	182	7	189	13,934	+2	187	34	153
Jul.	168	10	178	14,093	+5	174	26	148
Aug.	170	7	172	13,671	-14	191	26	165
Sep.	144	11	155	12,541	-38	192	30	162
Oct.	168	11	179	12,783	+ 8	171	18	153
Nov.	165	8	173	12,512	- 9	183	23	160
Dec.	161	10	171	13,316	+26	146	31	115
1989								
Jan.	173	12	185	14,273	+31	154	13	140
Feb.	165	14	179	14,498	+8	171	18	153
Mar.	169	13	182	13,881	-20	202	17	185

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Petroleum Supply Annual and Petroleum Supply Monthlies.

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1984

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	526	67	593	20,378	+3	596	5	588
Propane (1)	807	67	874	57,803	-7	867	30	833
Normal Butane (1)	265	37	302	13,681	+18	320	10	143
Isobutane (1)	99	24	123	8,987	+5	128	3	7
Total LPG's (1)	1,697	195	1,892	100,849	+19	1,911	48	1,572
Pentanes Plus (1)	292	46	338	7,597	+3	341	3	129
Total NGL's & LRG's (1)	1,989	241	2,230	108,446	+22	2,252	51	1,702
Petrochemicals	351	33	384	3,347	--	384	21	364
Lubricants	159	13	172	12,724	-2	170	15	156
Asphalt & Road Oil	386	18	404	17,183	+4	408	1	408
Petroleum Coke	439	0	439	4,839	+2	441	193	247
Miscellaneous Products	711	66	777	8,477	-1	776	4	773
Total Other Oils (1)	4,035	371	4,406	155,016	+25	4,431	285	3,650

1985

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	507	48	555	11,765	+24	579	3	573
Propane (1)	813	67	880	39,474	+50	930	48	880
Normal Butane (1)	276	43	319	14,157	-1	318	9	153
Isobutane (1)	109	29	130	7,313	+5	135	2	8
Total LPG's (1)	1,704	187	1,891	72,709	+77	1,968	62	1,614
Pentane Plus (1)	289	51	340	8,189	-2	338	2	135
Total NGL's & LRG's (1)	1,992	239	2,231	80,898	+76	2m307	64	1,749
Petrochemicals	357	23	380	3,116	+1	381	19	361
Lubricants	145	11	156	11,657	+3	159	15	144
Asphalt & Road Oil	398	33	431	21,207	-11	420	0	420
Petroleum Coke	453	0	453	6,159	-4	449	187	262
Miscellaneous Products	737	38	775	8,620	--	775	3	773
Total Other Oils (1)	4,082	344	4,426	131,657	+65	4,491	288	3,709

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(1) The discrepancy between total demand minus exports equals domestic demand is accounted for by refinery inputs, which are not shown here.

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1984 and Petroleum Supply Monthly December for 1985

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1986

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	493	19	512	15,421	+10	502	5	495
Propane (1)	817	110	927	62,852	+64	866	28	831
Normal Butane (1)	253	68	321	15,859	+2	321	7	146
Isobutane (1)	133	45	178	8,526	+3	175	2	41
Total LPG's (1)	1,694	242	1,936	102,658	+80	1,856	42	1,512
Pentanes Plus (1)	269	23	292	6,874	-4	296	2	116
Total NGL's & LRG's (1)	1,963	265	2,228	109,532	+76	2,152	45	1,629
Petrochemicals	404	85	489	3,986	+3	486	18	468
Lubricants	159	12	171	14,164	+6	165	23	142
Asphalt & Road Oil	410	29	439	17,707	-10	449	1	448
Petroleum Coke	506	0	506	6,030	--	506	238	268
Miscellaneous Products(3)	776	20	796	7,720	+5	791	3	789
Total Other Oils (1)	4,218	391	4,609	159,539	+80	4,549	327	3,741

1987

	Production	Imports	New Supply	Stocks as of December 31(mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane(1)	509	3	512	22,261	+19	493	4	486
Propane(1)	828	88	916	47,792	-41	957	24	924
Normal Butane(1)	260	60	320	16,542	+2	318	8	151
Isobutane(1)	152	40	192	10,499	+5	187	2	50
Total LPG's(1)	1,749	190	1,939	97,094	-15	1,954	38	1,612
Pentanes Plus(1)	291	11	302	7,025	--	302	2	138
Total NGL's & LRG's(1)	2,040	201	2,241	104,119	-15	2,256	40	1,749
Petrochemicals	384	79	463	3,938	-1	463	20	443
Lubricants	167	14	181	13,271	-2	184	23	161
Asphalt & Road Oil	434	36	470	18,799	+3	468	1	467
Petroleum Coke	512	1	513	6,750	+2	512	213	299
Miscellaneous Products	783	23	806	8,278	+2	805	5	800
Total Other Oils(1)	4,320	354	4,674	155,155	-11	4,688	302	3,919

(1) The discrepancy between total demand minus exports equals domestic demand is accounted for by refinery inputs, which are not shown here.

(2) Totals may not add due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual.

TOTAL U.S. SUPPLY AND DEMAND FOR "OTHER OILS" BY MAJOR CATEGORY
(Daily Averages in Thousands of Barrels)

1988

	Production	Imports	New Supply	Stocks as of December 31 (mb)	Change in Stocks	Total Demand	Exports	Domestic Demand
Ethane (1)	511	3	514	17,872	-12	526	4	520
Propane (1)	863	106	969	50,427	+7	962	31	923
Normal Butane (1)	285	65	350	21,009	+12	338	11	163
Isobutane (1)	157	35	192	8,031	-7	199	2	50
Total LPG's (1)	1,818	209	2,027	97,339	+1	2,026	49	1,656
Pentanes Plus (1)	302	11	313	6,649	-1	314	2	124
Total NGL's & LRG's (1)	2,120	221	2,341	103,988	-	2,341	51	1,780
Petrochemicals	335	147	482	3,704	-1	483	23	459
Lubricants	170	11	181	13,316	0	181	26	155
Asphalt & Road Oil	443	31	474	20,817	+6	468	1	468
Petroleum Coke	544	2	546	7,790	+3	553	231	312
Miscellaneous Products(3)	821	11	832	7,470	-2	834	19	825
Total Other Oils (1)	4,433	423	4,856	157,085	+ 6	4,850	341	3,999

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(1) The discrepancy between total demand minus exports equals domestic demand is accounted for by refinery inputs, which are not shown here.
(2) Totals may not add due to independent rounding.
(3) Miscellaneous Products include special naphtha, waxes, still gas and miscellaneous products.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual, 1988.

Section VII
Table 19

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks	Year's High		Year's Low		Strategic Petroleum Reserve Stocks
		Date	Stocks	Date	Stocks	
1960	239,800	Apr. 30	266,178	Sept. 30	231,966	
1961	244,644	May 31	261,440	Feb. 28	232,063	
1962	252,011	Nov. 30	256,284	Feb. 28	240,166	
1963	237,361	May 31	255,666	Dec. 31	237,361	
1964	230,057	May 31	257,322	Dec. 31	230,057	
1965	220,289	May 31	255,071	Dec. 31	220,289	
1966	238,391	June 30	253,388	Jan. 31	220,302	
1967	248,970	May 31	268,845	Dec. 31	248,970	
1968	272,193	Dec. 31	272,193	Jan. 31	244,946	
1969	265,227	June 30	284,544	Sept. 30	262,528	
1970	276,367	May 31	284,824	Aug. 31	254,144	
1971	259,648	May 31	284,320	Dec. 31	259,648	
1972	246,395	May 31	279,490	Dec. 31	246,395	
1973	242,478	May 31	257,867	Feb. 28	235,362	
1974	265,020	Nov. 30	271,144	Jan. 31	233,035	
1975	271,354	Apr. 30	281,908	Aug. 31	256,616	
1976	285,471	Nov. 30	298,836	Aug. 31	277,272	
1977(1)	339,857	Nov. 30	345,197	Feb. 28	291,462	7,826
1978	309,421	Mar. 31	345,482	Dec. 31	309,421	66,860
1979	339,074	Nov. 30	347,415	Jan. 31	302,059	91,191
1980	358,166	Aug. 31	387,223	Jan. 31	357,500	107,800
1981	363,464	Apr. 30	397,497	Sept. 30	355,982	230,341
1982	349,730	Feb. 28	371,762	Sept. 30	340,675	293,827
1983	343,850	Feb. 28	363,265	July 31	335,131	379,089
1984	345,376	May 31	358,995	Sept. 30	325,207	450,505

(1) Stocks were first reported for the Strategic Petroleum Reserve (SPR) in October, 1977. SPR stocks are included neither in the December 31 levels nor the year's highs and lows but are reported separately in the last column.

Source: 1960-1975: U.S. Department of Interior, Annual Petroleum Statements.
1975-1984: U.S. Department of Energy, Annual Petroleum Statements and Petroleum Supply Annuals.

Section VII
Table 19a

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks(1)	Year's High(1) Date	Year's High(1) Stocks	Year's Low(1) Date	Year's Low(1) Stocks	Strategic Petroleum Reserves Stocks
1985	320,892	May 31	356,630	Oct. 31	313,687	493,316
Jan.	336,127					457,409
Feb.	321,509					460,138
Mar.	329,624					461,617
Apr.	341,908					464,940
May	356,630					471,930
Jun.	344,058					476,571
Jul.	326,977					483,538
Aug.	318,474					487,126
Sep.	317,365					489,255
Oct.	313,687					489,881
Nov.	320,943					491,464
Dec.	320,892					493,316
1986	331,224	Oct. 31	343,892	June 30	326,654	511,565
Jan.	331,677					494,392
Feb.	331,724					495,381
Mar.	340,900					496,892
Apr.	337,791					498,781
May	328,640					499,877
Jun.	326,654					501,787
Jul.	341,798					503,400
Aug.	332,713					504,974
Sep.	337,799					506,385
Oct.	343,892					507,514
Nov.	339,084					509,471
Dec.	331,224					511,565
1987	348,995	Nov. 30	363,637	July 31	323,750	540,648
Jan.	333,029					514,910
Feb.	331,858					516,709
Mar.	332,451					519,987
Apr.	328,957					521,983
May	324,703					526,129
Jun.	327,598					527,187
Jul.	323,750					530,012
Aug.	332,468					531,978
Sep.	337,164					533,890
Oct.	355,894					535,652
Nov.	363,637					538,547
Dec.	348,995					540,648

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(1) December 31 stocks (stocks at month-end and year-end) and year's highs and lows exclude crude held in the SPR.

Source: U.S. Department of Energy, Petroleum Supply Annuals.

U.S. CRUDE OIL STOCKS
(Thousands of Barrels)

Year	December 31 Stocks(1)	Year's High(1)		Year's Low(1)		Strategic Petroleum Reserves Stocks
		Date	Stocks	Date	Stocks	
1988	330,359					
Jan.	345,583					559,515
Feb.	348,021					542,720
Mar.	354,003					544,146
Apr.	357,377					544,938
May	359,665	May 31	359,665			547,258
Jun.	358,858					547,949
Jul.	349,490					550,056
Aug.	333,564					551,344
Sep.	328,560					552,145
Oct.	339,588			Sep. 30	328,560	554,659
Nov.	337,014					556,001
Dec.	330,359					558,673
						559,515
1989						
Jan.	333,291					
Feb.	332,698					561,519
Mar.	326,315					563,888
						566,224

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(1) Stocks at month-end and year-end and year's highs and lows exclude crude oil held in the SPR.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthlies.

TWENTY LEADING COMPANIES
MOTOR GASOLINE SALES(1)
(Millions of Gallons)

1970		1980		1983		1984	
Company	Sales	Company	Sales	Company	Sales	Company	Sales
Texaco	7,300.0	Exxon	7,930.6	Standard of Indiana	7,419.4	Chevron(10)	10,396.1
Shell	7,050.0	Shell	7,913.8	Shell	7,180.3	Standard of Indiana	7,714.5
Standard of New Jersey	6,656.0	Standard of Indiana	7,790.6	Exxon	7,066.9	Texaco(11)	7,693.7
Standard of Indiana	6,557.0	Mobil	6,329.2	Texaco	5,937.2	Shell	7,252.6
Gulf	6,398.0	Texaco	6,262.4	Mobil	5,768.3	Exxon	7,112.7
Mobil	5,921.0	Standard of California	6,073.8	Gulf	5,427.5	Mobil	5,786.5
Atlantic Richfield	4,979.0	Gulf	5,670.9	Standard of California	5,167.5	Atlantic Richfield	5,085.6
Standard of California	4,161.0	Atlantic Richfield	4,067.5	Atlantic Richfield	4,857.7	Unocal	3,687.0
Sun	3,721.0	Union	3,681.9	Unocal(7)	3,584.6	Phillips	2,902.5
Phillips	3,559.0	Phillips	2,978.4	Phillips	2,730.9	U.S. Steel	2,733.3
Union	2,950.0	Sun	2,888.4	Sun	2,669.9	Sun	2,654.8
Standard of Ohio(2)	2,569.0	Marathon	2,278.6	U.S. Steel	2,295.3	Southland	2,422.8
Continental(3)	2,107.0	Standard of Ohio-BP	2,227.6	Southland(8)	2,235.8	DuPont	2,053.6
Cities Service	1,839.0	Conoco	1,864.1	Standard of Ohio	2,004.5	Standard of Ohio	1,955.2
Marathon	1,552.0	Ashland	1,768.6	DuPont	1,981.5	Ashland	1,662.8
Ashland(4)	1,283.0	Getty	1,565.2	Ashland	1,715.9	Tosco	1,166.0
Getty(5)	1,108.0	Cities Service	1,517.9	Getty	1,278.4	Diamond Shamrock	1,005.6
Tenneco	838.0	Clark	1,195.8	Tosco	1,162.2	American Petrofina	990.6
Kerr-McGee(6)	690.0	Tosco	960.2	Diamond Shamrock(9)	944.2	Tenneco	793.3
Murphy	677.0	Tenneco	928.7	American Petrofina	913.5	Total	734.3
U.S. TOTAL	89,862.0	U.S. TOTAL	105,228.5	U.S. TOTAL	102,215.6	U.S. TOTAL	105,066.5

(1) Sales data represent net taxable gasoline gallonage sold in the U.S. by all petroleum marketers, including non-retail sales by suppliers, cooperatives, etc.
(2) Includes sales of subsidiaries BP Oil and Boron.
(3) Includes sales under the brand names of Douglas, Kayo and Onco.
(4) Includes sales of subsidiary Northwestern Refining Company.
(5) Includes all sales by Skelly Oil Company.
(6) Includes sales under the brand name Triangle.
(7) Unocal Corporation is the parent of Union Oil Company of California.
(8) Includes Cities Service. Southland acquired the refining, marketing and transportation sections of Citgo Petroleum Corp., a subsidiary of Occidental, on September 1, 1983.
(9) Diamond Shamrock acquired Sigmor in September 1983.
(10) Standard Oil of California acquired the Gulf Corporation on June 15, 1984 and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure reflects this acquisition.
(11) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figures reflects this acquisition.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

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Table 20a

TWENTY LEADING COMPANIES
MOTOR GASOLINE SALES(1)
(Millions of Gallons)

1985		1986		1987	
Company	Sales	Company	Sales	Company	Sales
Chevron	8,423.4	Shell	8,692.1	Shell	9,074.7
Amoco (Standard of Indiana)	8,077.8	Amoco	8,330.2	Amoco	8,179.9
Shell	7,719.4	Exxon	7,799.2	Exxon	7,608.7
Exxon	7,492.9	Chevron(2)	7,620.9	Mobil	7,527.9
Texaco	7,051.6	Mobil	7,136.8	Chevron	7,233.2
Mobil	6,511.4	Texaco	7,102.0	Texaco	7,084.6
Atlantic Richfield	4,283.1	Unocal	4,058.9	Unocal	4,118.9
Union	3,979.1	Standard Oil	3,730.9	BP America (Standard)(5)	3,718.2
Standard Oil (Ohio)(2)	3,806.7	Phillips	3,204.4	Phillips	3,420.4
Phillips	3,201.4	ARCO	2,887.7	ARCO	3,201.5
Sun	2,690.7	Sun	2,777.7	Sun	2,917.7
Southland	2,525.3	Southland	2,768.7	USX(6)	2,720.2
U.S. Steel	2,499.2	USX (U.S. Steel)	2,752.4	DuPont(7)	2,373.5
DuPont	2,123.4	DuPont	2,246.6	Ashland	1,898.5
Ashland	1,700.1	Ashland	1,853.0	Petroleos de Venezuela(8)	1,655.3
American Petrofina	983.6	Diamond Shamrock	1,030.4	Cumberland Farms	1,469.6
Diamond Shamrock	976.3	American Petrofina	969.1	Southland(9)	1,458.5
Tenneco	888.5	Tenneco	913.2	Coastal(4)	1,005.0
Amerada Hess	764.4	Getty Petroleum	804.1	Diamond Shamrock Refining and Marketing(10)	952.9
Kerr-McGee	725.6	Cumberland Farms(11)	776.2	Tenneco	929.4
U.S. TOTAL	106,425.7	U.S. TOTAL	109,880.5	U.S. TOTAL	111,965.4

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(1) This data represents net taxable gallonage sold in the U.S. by all petroleum marketers, including non-retail sales by suppliers, cooperataives, etc.

(2) Because they are under common control, sales for Standard of Ohio and BP are combined.

(3) During 1986 Chevron sold most of its petroleum marketing and distribution assets in ten northwestern states and Ohio. The primary purchaser of these operations was Cumberland Farms, Inc.

(4) Includes sales under brand names Derby and Belcher.

(5) BP America was formed in 1987 through the acquisition of the Standard Oil Company by BP North America Inc.

(6) USX's figure includes sales under the brand name Marathon and affiliated brands.

(7) DuPont's figure includes sales under the brand name Conoco and affiliated brands.

(8) Petroleos de Venezuela, the Venezuelan national oil company, owns one-half of Citgo Petroleum, and one-half of Champlin Refining Company.

(9) Southland's figure represents the Southland Corporation's 50 percent ownership of Citgo Petroleum.

(10) Diamond Shamrock Refining and marketing became an independent company on Apil 30, 1987 when it was spun-off from Maxus Energy Corporation (the former Diamond Shamrock).

(11) Cumberland Farms purchased the Gulf assets from Chevron in 11 northeastern states. Cumberland Farms operates a division using the Gulf brand name in all states in its marketing territory, except Florida.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion Paper #014R.

1986 U.S. OIL PRODUCT CONSUMPTION BY STATE
(In Thousands of Barrels)

State	Motor Gasoline	Aviation Fuels	Middle Distillates	Residual Fuel Oil	Asphalt	Propane	All Other	Total Products
Alabama	43,423	2,974	18,023	2,099	3,739	2,803	9,551	82,812
Alaska	6,391	14,198	8,339	2,738	400	442	4,249	36,757
Arizona	38,437	4,282	8,894	1,089	2,714	943	7,367	63,726
Arkansas	26,645	589	11,456	482	1,053	3,004	5,651	48,880
California	307,521	59,832	81,582	56,330	16,487	11,604	69,746	603,302
Colorado	40,415	7,488	10,589	714	3,315	2,866	8,547	73,934
Connecticut	29,414	1,164	13,690	23,906	2,278	1,210	9,368	81,030
Delaware	9,177	115	7,172	1,115	653	109	2,398	20,739
Dist. of Columbia	3,482	337	3,245	844	22	60	1,044	9,034
Florida	129,989	19,101	30,689	38,299	8,837	7,194	30,603	264,712
Georgia	75,062	15,451	22,002	3,321	6,049	4,921	16,576	143,382
Hawaii	8,125	7,585	2,918	14,269	292	345	4,384	37,918
Idaho	10,677	412	5,052	2,190	583	475	2,535	21,924
Illinois	93,336	1,568	29,489	2,020	6,633	6,284	18,213	157,543
Indiana	59,374	17,430	29,037	2,191	6,503	4,700	15,586	134,821
Iowa	34,432	589	16,799	2,292	2,185	6,358	8,190	70,845
Kansas	55,623	6,351	30,452	1,595	2,849	33,057	16,984	146,911
Kentucky	41,993	3,121	19,022	519	2,451	3,271	9,200	79,577
Louisiana	62,470	16,393	44,829	29,956	1,921	11,385	21,824	188,778
Maine	12,485	533	7,438	7,490	787	574	3,831	33,138
Maryland	44,522	2,540	18,362	7,802	5,600	1,354	10,481	90,661
Massachusetts	54,027	6,489	40,468	35,188	1,195	1,536	18,157	157,060
Michigan	99,100	5,441	25,624	1,834	3,629	9,304	18,946	163,878
Minnesota	53,481	7,355	22,247	1,498	5,878	6,090	12,621	109,170
Mississippi	34,752	3,600	19,921	276	2,042	9,039	9,102	78,732
Missouri	60,041	6,248	17,948	376	4,690	4,213	12,260	106,046
Montana	11,301	1,041	6,189	56	2,133	1,388	2,890	24,998
Nebraska	17,525	556	11,919	1,061	1,023	2,641	4,539	39,264
Nevada	14,164	3,588	5,892	475	608	693	3,323	28,743
New Hampshire	6,235	132	6,875	2,910	593	953	2,313	20,011
New Jersey	117,614	37,025	81,346	33,345	5,968	2,808	36,354	314,460
New Mexico	18,274	1,005	8,358	544	1,733	5,032	4,568	39,514
New York	118,974	2,449	64,259	56,077	6,905	5,649	33,244	287,557
North Carolina	74,770	4,843	28,705	6,446	4,861	5,729	16,386	141,740
North Dakota	9,152	256	7,893	945	941	2,923	2,890	25,000
Ohio	110,739	8,964	39,899	2,322	7,873	4,238	22,750	196,785
Oklahoma	48,808	3,558	18,269	1,082	3,519	5,959	10,614	91,814
Oregon	30,377	2,344	15,784	2,917	2,386	1,350	7,210	62,368
Pennsylvania	113,535	9,091	57,521	29,135	6,388	5,043	28,852	249,565
Rhode Island	10,799	461	8,132	3,264	1,586	342	3,214	27,798
South Carolina	36,277	816	11,914	2,577	2,218	2,771	7,395	63,968
South Dakota	8,881	264	5,537	652	874	1,383	2,299	19,890
Tennessee	64,586	5,468	27,092	725	4,459	2,434	13,695	118,459
Texas	317,041	77,699	142,024	37,371	14,634	67,144	85,741	741,654
Utah	18,735	3,316	7,066	632	1,389	1,088	4,213	36,439
Vermont	2,481	258	2,582	358	449	578	877	7,583
Virginia	65,933	9,806	30,139	8,299	4,766	2,806	15,915	137,664
Washington	50,284	14,336	28,613	10,956	2,578	2,081	14,229	123,077
West Virginia	14,327	186	6,288	1,111	606	350	2,989	25,857
Wisconsin	48,111	1,334	21,215	211	2,204	5,293	10,244	88,612
Wyoming	7,022	138	7,594	353	1,721	4,726	2,818	24,372
TOTAL U.S.	2,770,338	400,122	1,196,390	444,256	175,472	268,980	687,007	5,942,565

Sources: Energy Information Administration and The Asphalt Institute.

Section VII
Table 21a

1987 U.S. OIL PRODUCT CONSUMPTION BY STATE
(In Thousands of Barrels)

State	Motor Gasoline	Aviation Fuels	Middle Distillates	Residual Fuel Oil	Asphalt	Propane	All Other	Total Products
Alabama	45,821	3,086	20,834	2,002	5,015	3,072	12,359	92,189
Alaska	5,866	15,119	7,328	11,586	264	217	6,252	46,632
Arizona	37,872	5,859	8,716	9	2,561	960	8,666	64,643
Arkansas	28,459	939	12,906	97	1,046	3,207	7,223	53,877
California	317,257	76,967	82,662	49,462	16,914	11,180	85,840	640,282
Colorado	39,118	8,008	9,904	281	3,197	2,656	9,779	72,943
Connecticut	31,714	1,589	13,311	24,806	2,198	1,156	11,577	86,351
Delaware	6,549	5,110	4,321	1,543	627	1,268	3,006	22,424
Dist. of Columbia	3,927	0	3,001	367	271	0	1,171	8,737
Florida	137,148	19,962	32,650	35,629	8,262	7,267	37,299	278,217
Georgia	76,881	17,254	23,122	2,424	6,501	8,364	20,366	151,912
Hawaii	7,869	8,883	2,993	14,947	408	436	5,502	41,038
Idaho	10,652	452	5,033	21	513	441	2,649	19,761
Illinois	96,755	1,536	29,230	2,552	6,490	7,253	22,266	166,082
Indiana	58,340	17,765	28,900	1,641	7,810	4,430	18,391	137,177
Iowa	32,427	657	16,430	17	1,838	4,448	8,642	64,459
Kansas	55,490	3,595	27,583	706	2,686	23,919	17,646	131,625
Kentucky	42,985	4,219	20,133	392	2,776	3,070	11,391	84,966
Louisiana	63,182	25,091	43,711	32,520	2,338	11,371	27,591	205,804
Maine	13,739	632	7,221	10,530	945	517	5,200	38,787
Maryland	43,862	2,367	18,274	6,913	5,043	1,370	12,050	89,879
Massachusetts	59,305	7,127	46,468	36,073	1,520	1,566	23,542	175,601
Michigan	97,689	6,389	23,122	1,600	3,883	9,131	21,956	163,770
Minnesota	45,702	6,726	16,928	993	6,022	4,547	12,528	93,440
Mississippi	35,799	6,382	21,048	639	2,734	8,661	11,575	86,338
Missouri	58,789	6,758	17,412	776	4,472	4,391	14,336	106,934
Montana	11,146	1,850	5,890	115	1,814	1,189	3,407	25,411
Nebraska	17,630	856	11,585	0	1,276	2,429	5,229	39,005
Nevada	14,299	3,939	6,160	210	888	711	4,057	30,264
New Hampshire	7,391	156	8,162	1,894	801	929	2,993	2,326
New Jersey	99,754	39,400	73,040	32,792	5,751	2,855	39,262	292,854
New Mexico	18,509	1,317	8,835	114	2,126	4,823	5,531	41,255
New York	118,538	2,539	56,692	54,420	7,095	5,046	37,828	282,158
North Carolina	76,698	5,189	30,056	6,544	4,407	6,015	19,958	148,867
North Dakota	8,362	427	6,980	245	976	3,032	3,100	23,122
Ohio	105,839	10,404	38,737	1,870	10,024	4,685	26,561	198,120
Oklahoma	50,427	6,758	18,494	999	2,805	5,919	13,222	98,624
Oregon	31,150	2,543	15,926	2,358	2,200	1,725	8,633	64,395
Pennsylvania	112,646	9,545	54,576	21,280	7,240	5,496	32,634	243,417
Rhode Island	12,986	594	7,976	2,565	1,938	369	4,092	30,520
South Carolina	37,433	796	12,513	2,800	2,660	2,992	9,165	68,359
South Dakota	8,719	1,013	5,305	2	693	951	2,583	19,266
Tennessee	64,997	5,077	27,443	421	5,105	2,486	16,338	121,867
Texas	304,142	92,323	132,089	33,923	12,950	76,497	100,932	752,856
Utah	18,866	4,717	7,589	642	1,468	1,119	5,326	39,727
Vermont	2,752	26	2,113	276	537	511	962	7,177
Virginia	66,434	10,834	30,366	9,522	4,832	2,373	19,254	143,615
Washington	54,136	16,103	24,984	9,816	2,331	1,993	16,932	126,295
West Virginia	15,077	194	7,002	958	551	288	3,727	27,797
Wisconsin	48,264	1,156	20,169	231	2,462	3,831	11,784	87,897
Wyoming	7,297	245	8,034	407	1,510	3,009	3,174	23,676
TOTAL U.S.	2,767,044	470,473	1,163,959	422,832	180,279	262,668	815,487	6,082,742

Source: Department of Energy, Energy Information Administration and The Asphalt Institute.

Section VII
Table 22

HISTORICAL U.S. OIL CONSUMPTION: 1918-1946
Total and Major Product
(Thousands of Barrels)

Year	Total Consumption	Motor Fuels(1)	Distillate	Residual	Kerosine	Other
1918	NA	79,949	142,751(2)	(2)	34,442	14,564
1919	374,586	88,648	163,803(2)	(2)	33,188	88,947
1920	455,806	108,945	185,972(2)	(2)	33,082	127,807
1921	457,560	116,840	195,656(2)	(2)	29,537	115,527
1922	530,975	137,770	237,063(2)	(2)	34,851	121,291
1923	652,114	174,462	261,388(2)	(2)	35,536	180,728
1924	687,540	196,586	290,766(2)	(2)	36,712	163,476
1925	727,178	232,745	307,033(2)	(2)	39,969	147,431
1926	780,755	268,128	339,572(2)	(2)	38,140	134,915
1927	803,177	305,367	339,265(2)	(2)	37,491	121,054
1928	860,241	338,881	383,974(2)	(2)	36,235	101,151
1929	940,581	382,878	415,156(2)	(2)	36,032	106,515
1930	926,642	397,609	368,531(2)	(2)	34,736	125,766
1931	902,593	403,843	334,668(2)	(2)	31,358	132,724
1932	825,230	377,791	65,101	243,056	33,221	116,061
1933	868,200	380,494	64,748	258,957	38,493	125,508
1934	919,838	410,339	74,824	265,547	44,234	124,894
1935	983,317	434,810	86,028	280,695	47,645	134,139
1936	1,092,379	481,606	102,757	307,884	51,428	148,704
1937	1,169,205	519,352	116,841	325,514	54,972	152,526
1938	1,136,705	523,003	117,449	291,833	56,360	148,060
1939	1,230,486	555,509	134,973	323,488	60,503	156,013
1940	1,326,620	589,490	160,851	340,163	68,776	167,340
1941	1,485,779	667,505	172,824	383,422	69,469	192,559
1942	1,449,908	589,110	185,661	405,697	69,767	199,673
1943	1,521,426	568,238	208,110	467,008	68,598	209,472
1944	1,671,263	632,482	209,320	512,020	71,812	245,629
1945	1,772,685	696,333	226,084	523,423	75,573	251,272
1946	1,792,786	735,417	242,894	480,029	89,088	245,358

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(1) Motor gasoline
(2) Distillate and residual fuel oils not reported separately until 1932.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Yearbooks.

SECTION VIII. REFINING

Table 1. Estimated Worldwide Crude Oil Refining Capacity by Area

Table 2 Worldwide Crude Oil Refinery Runs

Table 3. World Refinery Output by Area by Major Product

Table 4. U.S. Crude Oil Refining Capacity

Table 5. Percentage Yields of Refined Petroleum Products From Crude Oil in the United States

Table 6. U.S. Crude Oil Refinery Runs by P.A.D. District-Domestic vs. Foreign

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Table 12. U.S. Gas Processing Capacity and Average Production

Table 13. World Gas Processing Capacities and Average Production

ESTIMATED WORLDWIDE CRUDE OIL REFINING CAPACITY BY AREA
AS OF JANUARY 1
(Barrels per day)

Year	United States(1)	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia	Europe	Total Free World	Sino Soviet Bloc	Total World
1947	5,569,482	1,387,452	6,956,934	733,500	48,750	174,405	630,445	8,544,034	575,000(2)	9,119,034
1948	6,034,252	1,479,350	7,513,602	859,100	47,750	202,850	682,990	9,306,292	650,000(2)	9,956,292
1949	6,438,995	1,722,370	8,161,365	915,100	49,000	283,800	1,049,980	10,459,245	650,000(2)	11,109,245
1950	6,696,300	1,450,500	8,146,800	916,500	39,000	266,000	859,200	10,227,500	1,134,000	11,361,500
1951	6,963,644	1,770,400	8,734,044	940,900	41,000	282,900	1,014,900	11,013,744	1,010,000(2)	12,023,744
1952	7,332,885	1,700,100	9,032,985	950,000	49,000	344,000	1,495,000	11,870,985	1,108,100(2)	12,979,085
1953	7,619,720	2,180,200	9,799,920	1,093,900	52,100	379,200	1,835,400	13,160,520	1,087,000	14,247,520
1954	7,983,977	2,392,700	10,376,677	1,159,100	72,400	459,800	2,077,500	14,145,477	1,246,100	15,391,577
1955	8,386,044	2,566,500	10,952,544	1,184,300	68,400	613,700	2,365,900	15,184,844	1,784,000	16,968,844
1956	8,582,636	2,776,800	11,359,436	1,272,800	72,400	731,000	2,373,700	15,809,336	1,481,000	17,290,336
1957	9,071,697	3,087,400	12,159,097	1,235,200	93,400	876,000	2,762,700	17,126,397	1,550,000	18,676,397
1958	9,358,307	3,438,600	12,796,907	1,253,700	98,400	1,088,500	2,902,900	18,140,407	(3)	(3)
1959	8,761,446	3,680,500	13,441,946	1,432,800	100,100	1,229,600	3,633,200	19,837,646	(3)	(3)
1960	9,842,624	3,762,300	13,604,924	1,434,800	116,500	1,374,600	3,977,500	20,508,324	3,322,000	23,830,324
1961	9,998,573	4,188,000	14,186,573	1,481,800	122,500	1,431,700	4,476,100	21,698,673	(3)	(3)
1962	10,033,047	4,442,900	14,475,947	1,514,100	140,300	1,913,000	4,918,100	22,961,447	(3)	(3)
1963	10,010,921	4,687,200	14,698,121	1,754,900	196,800	2,129,800	5,149,400	23,929,021	(3)	(3)
1964	10,305,774	5,828,400	15,134,174	1,801,300	365,200	2,537,000	6,263,500	26,101,174	(3)	(3)
1965	10,419,851	5,021,500	15,441,351	1,801,400	502,900	3,176,600	7,510,500	28,432,751	4,656,000	33,088,751
1966	10,393,839	5,344,500	15,738,339	1,910,200	613,300	3,516,700	8,541,900	30,320,439	3,976,000	34,296,439
1967	10,658,407	5,544,500	16,202,907	1,960,200	704,500	3,955,700	9,526,900	32,350,207	(3)	(3)
1968	11,353,404	5,883,100	17,236,504	2,052,700	720,100	4,323,900	11,085,000	35,418,204	5,925,000	41,343,204
1969	11,702,309	6,290,200	17,992,509	2,296,500	756,100	4,919,800	12,884,300	38,849,209	6,345,000	45,194,209
1970	12,021,273	6,512,500	18,533,773	2,437,900	784,900	5,565,900	13,941,400	41,263,873	7,092,000	48,355,873
1971	12,860,228	7,128,600	19,988,828	3,171,700	924,900	6,060,900	15,177,200	45,323,528	7,860,000	53,183,528
1972	13,292,468	7,578,600	20,871,068	2,851,300	902,400	6,817,700	16,982,800	48,425,268	8,420,000	56,845,268
1973	13,671,384	8,175,800	21,847,184	2,757,700	825,100	7,915,700	16,826,700	50,172,384	9,110,000	59,282,384
1974	14,361,536	9,053,800	23,415,336	2,882,200	1,092,200	8,932,700	18,110,100	54,432,536	9,686,000	64,118,536
1975	14,960,710	9,536,103	24,496,813	3,280,613	1,083,305	9,397,360	18,718,363	56,976,454	10,575,000	67,551,454

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(1) Includes operating capacity plus operable shutdown but excludes inoperable shutdown capacity
(2) Estimates for U.S.S.R. only
(3) Data not available

Source: United States: U.S. Bureau of Mines, Petroleum Refineries in the United States and Puerto Rico: Annual
Rest of the World: Oil & Gas Journal, "World Wide Issues" and "International Petroleum Encyclopedia"

Section VIII
Table 1a

ESTIMATED WORLDWIDE CRUDE OIL REFINING CAPACITY BY AREA
AS OF JANUARY 1
(Barrels per day)

Year	United States(1)	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia	Europe	Total Free World	Sino Soviet Bloc	Total World
1976	15,236,621	9,713,093	24,949,714	3,284,951	1,328,200	9,868,344	19,972,306	59,403,515	12,406,000	71,809,515
1977	16,398,372	10,015,186	26,413,558	3,347,855	1,444,400	10,047,965	20,859,376	62,113,154	13,067,810	75,180,964
1978	17,047,724	10,592,020	27,352,020	3,506,484	1,467,157	10,176,819	20,728,204	63,352,984	13,938,000	77,290,984
1979	17,440,885	10,273,030	27,713,915	3,546,029	1,667,608	10,284,966	20,328,614	63,541,132	14,748,000	78,289,132
1980	17,988,121	10,683,671	28,671,792	3,518,080	1,666,108	10,386,375	20,243,747	64,486,102	15,346,000	79,832,102
1981	18,620,520	10,716,881	29,337,401	3,729,646	1,697,658	10,554,691	20,205,799	65,524,895	16,036,500	81,561,395
1982	17,889,734	10,720,055	28,609,789	3,312,152	1,761,870	10,966,825	19,444,519	64,095,155	16,533,000	80,628,155
1983	16,859,337	9,873,816	26,733,153	3,685,333	1,882,105	10,902,204	17,124,989	60,327,784	16,873,000	77,200,784
1984	16,137,141	9,590,962	25,520,962	3,901,082	1,879,990	10,473,079	16,231,932	58,114,186	17,200,000	75,314,186
1985	15,658,769	9,457,706	24,857,706	4,052,673	2,447,156	10,393,562	15,654,622	57,664,488	17,500,000	75,164,488
1986	15,458,948	8,613,690	24,072,638	4,274,255	2,520,403	10,111,652	14,071,507	55,050,455	17,500,000	72,550,455
1987	15,565,513	8,676,740	24,242,253	3,862,622	2,523,563	10,400,180	13,929,325	54,957,943	17,610,000	72,567,943
1988	15,915,418	8,856,748	24,772,166	4,146,222	2,630,250	10,274,302	14,127,595	55,950,479	17,610,000	73,560,479
1989	15,556,700	8,839,238	24,395,938	4,334,676	2,786,987	10,064,786	13,858,624	55,441,011	17,798,135	73,239,146

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(1) Includes operating capacity plus operable shutdown but excludes inoperable shutdown capacity

Source: 1976-1988: United States: U.S. Energy Information Administration, Petroleum Refineries in the United States and Puerto Rico, Petroleum Supply Annuals.
Rest of the World: Oil & Gas Journal, "Worldwide Report" Issue
1989: Oil and Gas Journal, "Worldwide Report" issue, Dec. 26,1988.

Section VIII
Table 2

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
United States	9,043	9,444	9,815	10,312	10,629	10,870	11,200	11,696	12,431	12,133	12,442	13,416
Utilization Rate (%)	86.8	90.9	92.1	90.8	90.8	90.4	87.1	88.0	90.9	84.5	83.2	88.0
Other Western Hemisphere	4,880	5,070	5,240	5,485	5,780	6,185	6,690	6,980	7,645	7,655	7,215	7,380
Utilization Rate (%)	97.2	94.9	94.5	93.2	91.9	95.0	93.8	92.1	93.5	84.5	75.7	76.0
Western Europe	7,175	8,080	8,830	10,045	11,195	12,730	13,145	13,910	15,065	14,175	12,415	13,625
Utilization Rate (%)	95.5	94.6	92.7	90.6	86.9	91.3	86.6	81.9	89.5	78.3	66.3	68.2
Middle East	1,525	1,580	1,645	1,765	1,875	2,105	2,240	2,165	2,170	2,330	2,075	2,300
Utilization Rate (%)	84.7	82.7	83.9	86.0	81.6	86.3	70.6	75.9	78.7	80.8	63.2	70.0
Africa	465	540	570	520	535	710	740	815	905	910	975	1,020
Utilization Rate (%)	92.4	88.1	80.9	72.2	70.7	90.4	80.0	90.4	109.7	83.3	90.0	76.8
Asia	2,530	2,975	3,475	4,350	4,930	5,580	6,230	6,350	7,345	7,035	6,755	7,375
Utilization Rate (%)	79.6	84.6	87.8	100.6	100.2	100.3	102.8	93.1	92.8	78.8	71.9	74.7
Total Non-Communist World	25,618	27,689	29,575	32,477	34,944	38,180	40,245	41,916	45,561	44,238	41,877	45,116
Utilization Rate (%)	90.1	91.3	91.4	91.7	89.9	92.5	88.8	86.6	90.8	81.3	73.5	75.9
Communist Nations	4,890	5,270	5,655	6,115	6,705	7,335	7,845	8,555	9,365	10,185	11,025	11,575
Utilization Rate (%)	NA	NA	NA	NA	NA	103.4	99.8	101.6	102.8	105.2	104.3	93.3
Total World	30,508	32,959	35,230	38,592	41,649	45,515	48,090	50,471	54,926	54,423	52,902	56,691
Utilization Rate (%)	NA	NA	NA	NA	NA	94.1	90.4	88.8	92.7	84.9	78.3	78.9

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S. Bureau of Mines: Crude Petroleum, Petroleum Products, and Natural Gas Liquids, Annual and December Issues
Rest of the World, BP Statistical Review of the World Oil Industry, Annual Reports

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
United States	14,602	14,739	14,648	13,483	12,477	11,774	11,685	12,044	12,165	12,716
Utilization Rate (%)	89.0	86.5	84.0	75.0	67.0	65.8	69.3	76.9	77.6	82.3
Other Western Hemisphere	7,520	7,795	8,180	8,545	8,520	7,730	7,370	7,285	6,945	6,955
Utilization Rate (%)	75.1	73.6	79.6	80.0	79.5	72.1	74.7	76.0	74.4	73.8
Western Europe	12,775	12,855	13,665	12,330	10,970	10,075	9,710	9,790	9,490	10,060
Utilization Rate (%)	61.2	62.0	67.2	60.9	54.3	51.8	56.7	60.3	60.6	70.2
Middle East	2,240	2,535	2,365	2,445	2,205	2,245	2,515	2,665	2,795	2,950
Utilization Rate (%)	66.9	72.3	66.7	69.5	59.1	67.8	68.2	75.8	75.3	69.0
Africa	1,165	1,280	1,355	1,460	1,525	1,735	1,920	1,975	2,015	2,095
Utilization Rate (%)	80.7	87.3	81.2	87.6	89.8	98.5	102.0	77.8	79.2	83.1
Asia	7,600	7,905	8,165	7,730	7,560	7,160	7,120	7,310	7,370	7,465
Utilization Rate (%)	76.5	77.7	79.4	74.4	71.6	65.3	65.3	69.8	70.9	71.0
Total Non-Communist World	45,902	47,109	48,378	45,993	43,257	40,720	40,320	41,069	40,780	42,241
Utilization Rate (%)	73.9	74.4	76.1	71.3	66.0	63.5	66.8	70.7	72.2	75.3
Communist Nations	11,930	12,875	13,230	13,320	13,420	13,575	13,675	13,885	14,165	14,500
Utilization Rate (%)	91.3	92.4	89.7	86.8	83.7	82.1	81.0	80.7	80.9	81.9
Total World	57,832	59,984	61,608	59,313	56,677	54,295	53,995	54,954	54,945	56,741
Utilization Rate (%)	76.9	77.6	78.7	74.3	68.5	67.3	69.9	73.0	74.5	76.9

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S.--Energy Information Administration, Annual Petroleum Statements and Petroluem Supply Annuals.
Rest of World--BP Statistical Report of the World Oil Industry, Annual Report

Section VIII
Table 2b

WORLDWIDE CRUDE OIL REFINERY RUNS AND REFINERY UTILIZATION RATES(1)
(Thousands of barrels per day)

	1987	1988
United States	12,854	13,246
Utilization Rate (%)	83.1	84.4
Other Western Hemisphere	7,020	7,020
Utilization Rate	76.0	74.8
Western Europe	9,950	10,280
Utilization Rate	71.3	73.6
Middle East	2,970	3,140
Utilization Rate	70.6	72.4
Africa	2,170	2,200
Utilization Rate	82.0	81.6
Asia	7,380	7,620
Utilization Rate	72.7	76.0
Total Non-Communist World	42,344	43,506
Utilization Rate	76.5	77.2
Communist Nations	14,580	14,755
Utilization Rate	81.5	82.0
Total World	56,925	58,261
Utilization Rate	77.7	78.4

(1) Utilization rates, obtained by dividing crude runs by crude refining capacity, were calculated by API.

Source: U.S.--Department of Energy, Energy Information Administraiton, Petroleum Supply Annual
Rest of World--BP Statistical Review of World Energy, Annual

Section VIII
Table 3

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1980					1981				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,526	2,661	1,580	3,855	14,622	6,437	2,613	1,321	3,638	14,009
Canada	665	499	309	557	2,030	638	448	271	526	1,883
Mexico	329	245	309	371	1,254	360	270	365	297	1,292
Central and South America(1)	920	1,134	2,011	1,151	5,216	943	1,060	1,773	1,086	4,862
Western Europe	2,477	4,112	3,592	3,060	13,241	2,368	3,649	3,217	2,973	12,207
Middle East	325	545	890	1,076	2,836	304	544	837	996	2,681
Africa	286	394	433	378	1,491	297	397	434	371	1,499
Asia	1,473	1,864	3,691	3,092	10,120	1,410	2,017	2,917	3,355	9,699
Eastern Europe and U.S.S.R.	2,080	2,962	3,478	3,665	12,185	2,087	2,981	3,490	3,493	12,051
Total World	15,081	14,415	16,294	17,205	62,995	14,844	13,979	14,625	16,735	60,183

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Energy Information Administration, International Energy Annuals.

Section VIII
Table 3a

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1982					1983				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,358	2,606	1,070	3,357	13,391	6,360	2,456	852	3,470	13,138
Canada	619	396	208	416	1,639	597	388	175	406	1,566
Mexico	346	235	350	371	1,302	353	224	350	402	1,329
Central and South America (1)	940	988	1,720	1,063	4,711	963	1,034	1,511	1,153	4,661
Western Europe	2,456	3,530	2,896	2,307	11,187	2,529	3,434	2,630	2,398	10,991
Middle East	324	648	925	892	2,789	319	681	925	958	2,883
Africa	317	454	507	434	1,712	324	505	547	461	1,837
Asia	1,439	2,200	2,781	2,723	9,143	1,544	2,242	2,712	2,711	9,209
Eastern Europe and U.S.S.R.	2,158	3,023	3,437	3,602	12,220	2,271	3,090	3,476	3,441	12,278
Total World	14,957	14,080	13,894	15,165	58,096	15,260	14,054	13,178	15,399	57,892

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Energy Information Administration, International Energy Annuals.

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1984					1985				
	Gasoline(2)	Distillate	Residual	Other(3)	Total	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,478	2,680	891	3,630	13,679	6,441	2,687	882	3,740	13,750
Canada	586	410	161	548	1,705	589	401	127	691	1,807
Mexico	363	266	375	479	1,483	360	292	398	523	1,572
Central and South America(1)	1,027	1,075	1,417	1,205	4,723	908	1,049	1,245	1,175	4,379
Western Europe	2,624	3,609	2,537	3,170	11,939	2,684	3,574	2,306	3,128	11,692
Middle East	401	805	970	1,122	3,296	427	952	1,034	1,065	3,479
Africa	322	495	536	527	1,879	351	515	537	494	1,896
Asia	1,612	2,325	2,623	2,979	9,540	1,659	2,417	2,343	2,966	9,385
Eastern Europe and U.S.S.R.	2,153	3,043	3,452	3,426	12,075	2,172	2,984	3,426	3,184	11,766
TOTAL WORLD	15,566	14,708	12,962	17,085	60,320	15,591	14,872	12,298	12,966	59,727

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Department of Energy, Energy Information Administration, International Energy Annuals.

WORLD REFINERY OUTPUT BY AREA FOR MAJOR PETROLEUM PRODUCTS
(Thousands of Barrels Per Day)

	1986				
	Gasoline(2)	Distillate	Residual	Other(3)	Total
United States	6,752	2,796	889	4,085	14,522
Canada	551	394	115	475	1,535
Mexico	369	243	468	446	1,526
Central and South America(1)	1,892	1,062	1,178	1,217	4,349
Western Europe	2,772	3,902	2,450	2,905	12,029
Middle East	493	1,022	1,301	1,193	4,009
Africa	317	504	600	496	1,917
Asia	1,694	2,570	2,292	3,030	9,586
Eastern Europe and U.S.S.R.	2,247	2,840	4,219	3,089	12,395
TOTAL WORLD	16,087	15,334	13,512	16,935	61,868

(1) Includes Cuba.
(2) Includes motor gasoline and aviation gasoline.
(3) Includes refinery fuels and loss.

Source: U.S. Department of Energy, Energy Information Administration, International Energy Annual 1987.

U.S. CRUDE OIL REFINING CAPACITY
(AS OF JANUARY 1)

	NUMBER OF REFINERIES			CRUDE OIL THROUGHPUT CAPACITY		
Year	Operating	Shutdown	Total	Operating	Operable Shutdown	Inoperable Shutdown(1)
1947	361	38	399	5,336,399	233,083(2)	
1948	352	38	390	5,825,566	208,686(2)	
1949	336	39	375	6,230,505	208,490(2)	
1950	320	47	367	6,222,998	473,302(2)	
1951	325	32	357	6,701,815	261,829(2)	
1952	327	23	350	7,161,366	171,519(2)	
1953	315	28	343	7,481,701	138,019	18,941
1954	308	29	337	7,782,103	201,874	22,920
1955	296	30	326	8,069,154	316,890	34,586
1956	294	24	318	8,380,801	201,835	49,754
1957	298	21	319	8,808,841	262,856	51,977
1958	289	29	318	8,939,907	418,400	49,400
1959	291	22	313	9,450,741	310,705	58,400
1960	290	20	310	9,543,329	299,295	58,800
1961	289	22	311	9,629,685	368,888	11,500
1962	287	24	311	9,812,248	220,799	72,100
1963	287	21	308	9,814,791	196,130	107,400
1964	282	22	304	10,063,164	242,610	79,600
1965	273	27	300	10,161,311	258,540	354,744
1966	267	19	286	10,171,159	222,680	98,900
1967	260	21	281	10,412,447	245,960	101,200
1968	270	21	291	11,172,694	180,710	179,450
1969	264	20	284	11,575,829	126,480	37,200
1970	262	19	281	11,882,393	138,880	53,050
1971	253	26	279	12,658,248	201,980	159,750
1972	250	32	282	13,034,818	257,850	145,000
1973	253	28	281	13,482,909	188,475	132,200
1974	257	27	284	14,220,316	141,220	127,900
1975	262	28	290	14,696,750	263,960	208,100

(1) Facilities inoperable, needing extensive reconditioning
(2) Not identified separately prior to 1953

Source: U.S. Bureau of Mines, "Petroleum Refineries in the United States and Puerto Rico" Annual

Section VIII
Table 4a

U.S. CRUDE OIL REFINING CAPACITY
(AS OF JANUARY 1)

	NUMBER OF REFINERIES			CRUDE OIL THROUGHPUT CAPACITY		
Year	Operating	Shutdown(3)	Total	Operating	Operable Shutdown	Inoperable Shutdown(2)
1976	265	22	287	14,867,529	369,092	190,900
1977	273	18	291	15,861,735	536,637	211,500
1978	290	12	302	16,793,724	254,000	182,223
1979	301	10	311	17,147,875	293,010	103,500
1980	311	8	319	17,612,652	376,469	N.A.
1981	315	9	324	18,051,260	569,260	N.A.
1982	254	47	301	16,103,579	1,786,155	N.A.
1983	233	25	258	14,960,647	1,898,690	N.A.
1984	214	33	247	14,837,685	1,299,456	N.A.
1985	199	24	223	14,360,583	1,298,186	N.A.
1986	192	24	216	14,638,507	820,441	N.A.
1987	195	24	219	14,940,463	625,050	N.A.
1988	195	18	213	15,017,968	897,450	N.A.
1989	193	11	204	15,011,824	643,050	N.A.

(1) Does not include Puerto Rico refineries.
(2) Facilities inoperable, needing extensive reconditioning.
(3) Figures beginning with 1980 are for operable shutdown only.

Source: U.S. Energy Information Administration, "Petroleum Refineries in the United States and U.S. Territories" Annual
Formerly Titled, "Petroleum Refineries in the United States and Puerto Rico" Annual
1982-1989: U.S. Energy Information Administration, Petroleum Supply Annuals

PERCENTAGE YIELDS OF REFINED PETROLEUM PRODUCTS FROM CRUDE OIL(1) IN THE UNITED STATES-ANNUALLY 1964-1977

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Gasoline	44.1	44.0	44.4	44.0	43.9	44.8	45.3	46.2	46.2	45.6	45.9	46.5	45.5	43.4
Jet Fuel	5.6	5.7	6.2	7.5	8.3	8.2	7.5	7.4	7.2	6.8	6.8	7.0	6.8	6.6
Ethane (including Ethylene)	(2)	(2)	(2)	(2)	(2)	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Liquefied Gases	3.3	3.2	3.0	3.1	3.1	2.9	3.0	2.9	2.8	2.8	2.6	2.4	2.4	2.3
Kerosine	2.9	2.8	2.9	2.7	2.7	2.6	2.3	2.1	1.8	1.7	1.3	1.2	1.1	1.2
Distillate Fuel Oil	22.8	22.9	22.5	22.2	22.1	21.7	22.4	22.0	22.2	22.5	21.8	21.3	21.8	22.4
Residual Fuel Oil	8.2	8.1	7.6	7.7	7.2	6.8	6.4	6.6	6.8	7.7	8.7	9.9	10.3	12.0
Petrochemical Feedstocks	1.8	1.7	2.1	2.4	2.5	2.5	2.5	2.7	2.9	2.9	3.0	2.7	3.3	3.6
Special Naphthas	0.8	0.9	0.9	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.6	0.7	0.6
Lubricants	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.6	1.2	1.3	1.2
Wax	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1
Coke	2.6	2.5	2.5	2.5	2.5	2.6	2.7	2.6	2.8	2.9	2.8	2.8	2.6	2.5
Asphalt	3.5	3.7	3.8	3.5	3.6	3.5	3.6	3.8	3.6	3.6	3.7	3.2	2.8	2.9
Road Oil	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.0	0.1
Still Gas	4.0	4.1	3.9	3.9	4.0	4.1	4.1	3.8	3.9	3.9	3.9	3.9	3.7	3.8
Miscellaneous	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.7	1.0	1.0
Shortage(3)	-2.4	-2.4	-2.5	-2.9	-3.0	-3.1	-3.2	-3.4	-3.3	-3.6	-3.9	-3.7	-3.5	-3.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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(1) Other unfinished oils added to crude oil in computing yield
(2) Included with liquefied gases
(3) Processing Gain(-) or Loss(+)

Source: U.S. Energy Information Administration

PERCENTAGE YIELDS OF REFINED PETROLEUM PRODUCTS FROM CRUDE OIL(1) IN THE UNITED STATES-ANNUALLY 1978-1988

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Gasoline	44.1	43.0	44.5	44.8	46.4	47.6	46.7	45.8	45.9	46.6	46.2
Jet Fuel	6.6	6.9	7.4	7.6	8.1	8.5	9.1	9.6	9.8	10.0	10.0
Ethane (including Ethylene)	0.1	0.1	-	0.1	-	-	-	-	-	-	-
Liquefied Gases	2.3	2.3	2.4	2.4	2.2	2.7	2.9	3.1	3.2	3.4	3.6
Kerosine	1.0	1.3	1.0	0.9	0.9	0.9	0.9	0.8	0.7	0.6	0.6
Distillate Fuel Oil	21.4	21.5	19.7	20.5	21.5	20.5	21.5	21.6	21.2	20.5	20.8
Residual Fuel Oil	11.3	11.5	11.7	10.4	8.8	7.1	7.1	7.1	6.7	6.6	6.7
Petrochemical Feedstocks	4.1	4.7	5.1	4.7	3.6	3.3	2.8	2.8	3.1	2.9	2.4
Special Naphthas	0.7	0.6	0.7	0.6	0.4	0.5	0.4	0.4	0.4	0.4	0.4
Lubricants	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.2	1.3	1.2
Wax	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Coke	2.5	2.6	2.7	3.1	3.4	3.5	3.5	3.7	3.8	3.8	4.0
Asphalt	3.2	3.1	2.9	2.7	2.7	3.1	3.1	3.2	3.1	3.3	8.2
Road Oil	0.1	-	0.1	-	-	(4)	(4)	(4)	(4)	(4)	(4)
Still Gas	3.7	3.8	4.0	4.3	4.4	4.6	4.5	4.7	4.9	4.8	4.9
Miscellaneous	0.9	0.8	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
Shortage(2)	-3.4	-3.6	-4.4	-4.0	-4.4	-4.1	-4.4	-4.5	-4.7	-4.8	-4.8
TOTAL(3)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Other unfinished oils added to crude oil in computing yield.
(2) Processing Gain (-) or Loss (+).
(3) Totals may not add due to independent rounding.
(4) Included in asphalt.

Source: 1978-1980--U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1988--U.S. Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 6

U.S. CRUDE OIL REFINERY RUNS BY P.A.D. DISTRICT-DOMESTIC vs FOREIGN
(Thousands of barrels per day)

	DISTRICT II		DISTRICT II		DISTRICT III		DISTRICT IV		DISTRICT V		TOTAL	
Year	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
1947	648	265	1,312	-	1,889	2	133	-	826	-	4,808	267
1948	640	326	1,418	-	2,154	13	151	-	895	-	5,258	339
1949	486	374	1,404	-	1,973	46	165	-	876	3	4,904	423
1950	545	459	1,594	-	2,053	23	185	-	880	-	5,257	482
1951	641	477	1,796	1	2,398	10	215	-	947	10	5,997	498
1952	618	517	1,845	3	2,463	12	223	-	958	31	6,107	563
1953	601	552	1,949	7	2,601	8	235	-	975	71	6,361	638
1954	549	585	1,953	7	2,594	12	238	-	970	51	6,304	655
1955	530	633	2,119	18	2,832	30	255	-	968	95	6,704	776
1956	559	669	2,224	54	3,010	32	268	(1)	943	178	7,004	933
1957	640	656	2,219	60	2,898	24	273	(1)	900	249	6,930	989
1958	555	644	2,224	71	2,760	43	266	(1)	892	188	6,697	946
1959	574	641	2,340	59	2,922	27	290	(1)	902	238	7,028	965
1960	550	667	2,349	66	2,978	6	285	(1)	891	275	7,053	1,014
1961	573	650	2,347	86	3,020	6	284	(1)	910	308	7,134	1,050
1962	546	668	2,366	97	3,174	4	303	(1)	898	354	7,287	1,123
1963	566	680	2,445	96	3,322	3	298	9	926	342	7,557	1,130
1964	523	689	2,463	107	3,408	2	307	13	911	384	7,612	1,195
1965	489	711	2,533	112	3,506	(1)	317	13	957	405	7,802	1,241
1966	548	711	2,660	130	3,664	1	325	13	1,024	368	8,221	1,223
1967	680	587	2,693	156	3,901	2	326	18	1,095	357	8,695	1,120
1968	596	707	2,744	214(2)	4,116	2	339	27	1,243	324	9,038	1,274
1969	560	749	2,773	240(2)	4,263	(1)	351	35	1,267	391	9,214	1,415
1970	706	584	2,844	310(2)	4,357	-	345	47	1,297	380	9,549	1,321
1971	649	682	2,853	377(2)	4,438	54	360	45	1,239	503	9,539	1,661
1972	347	971	2,850	461(2)	4,741	75	360	37	1,193	661	9,491	2,205
1973	237	1,264	2,774	711(2)	4,656	398	372	44	1,167	808	9,206	3,225
1974	236	1,173	2,654	679(2)	4,317	786	376	44	1,098	770	8,681	3,452
1975	166	1,242	2,637	775(2)	4,078	1,182	380	45	1,086	851	8,347	4,095

(1) Less than 1,000 barrels daily
(2) Includes some Athabasca hydrocarbons

Source: Bureau of Mines, Annual Petroleum Statements

Section VIII
Table 6a

U.S. CRUDE OIL REFINERY RUNS(3) BY P.A.D. DISTRICT-DOMESTIC vs FOREIGN
(Thousands of barrels per day)

	DISTRICT I		DISTRICT II		DISTRICT III		DISTRICT IV		DISTRICT V		TOTAL	
Year	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
1976	170	1,416	2,611	989(2)	3,957	1,760	391	50	1,038	1,034	8,167	5,249
1977	136	1,538	2,386	1,393	3,886	2,460	426	54	1,199	1,124	8,033	6,569
1978	205	1,513	2,392	1,416	3,802	2,636	433	54	1,660	627	8,482	6,246
1979	166	1,480	2,238	1,491	3,584	2,806	415	62	1,865	539	8,269	6,379
1980	221	1,233	2,098	1,198	3,645	2,298	394	47	1,903	445	8,261	5,221
1981(3)	205	1,126	2,181	785	3,630	1,951	390	33	1,900	300	8,306	4,195
1982	211	982	2,161	621	3,876	1,522	374	41	1,888	191	8,510	3,357
1983	211	827	2,174	570	3,909	1,509	380	44	1,883	227	8,556	3,177
1984	174	936	2,221	536	3,955	1,622	401	32	2,061	214	8,812	3,341
1985	152	767	2,114	590	4,102	1,365	393	194	2,124	194	8,884	2,958
1986	144	1,030	2,073	753	3,848	2,143	370	63	2,273	229	8,707	4,217
1987	117	1,136	2,034	812	3,536	2,480	371	66	2,319	199	8,376	4,693
1988	116	1,184	1,998	918	3,307	2,906	384	67	2,428	209	8,233	5,284

(2) Includes some Athabasca hydrocarbons.
(3) Beginning with 1981, figures are for refinery receipts of crude oil

Source: U.S. Energy Information Administration, P.A.D. Supply/Disposition Annual
1981-1982--U.S. Energy Information Administration, Petroleum Supply Annual
1983-1988--U.S. Energy Information Administration, Petroleum Supply Annual, Refinery Capacity

Section VIII
Table 7

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1988

District and State	Number of Operable Refineries			Crude Capacity			
				Barrels Per Calendar Day		Barrels Per Stream Day	
	Total	Operating	Idle(1)	Operating	Idle	Operating	Idle
Delaware	1	1	0	140,000	0	150,000	0
Florida	1	0	1	0	17,000	0	20,000
Georgia	2	1	1	5,655	28,000	6,000	29,000
New Jersey	6	6	0	434,400	0	456,400	0
New York	1	1	0	41,850	0	45,000	0
North Carolina	2	1	1	3,000	10,000	3,500	12,000
Pennsylvania	8	8	0	727,000	0	759,500	0
Virginia	2	2	0	53,400	0	55,550	0
West Virginia	2	2	0	16,808	0	17,500	0
PAD District I Total	25	22	3	1,422,113	55,000	1,493,450	61,000
Illinois	7	7	0	854,700	75,000	898,600	80,000
Indiana	5	4	1	422,900	1,000	437,100	2,000
Kansas	8	6	2	322,400	30,400	339,483	32,000
Kentucky	3	2	1	218,900	600	226,300	1,000
Michigan	3	3	0	113,500	0	120,000	0
Minnesota	2	2	0	222,143	0	237,220	0
North Dakota	1	1	0	58,000	0	60,000	0
Ohio	4	4	0	488,100	0	507,000	0
Oklahoma	6	6	0	381,500	0	398,700	0
Tennessee	1	1	0	60,000	0	65,000	0
Wisconsin	1	1	0	32,000	0	34,000	0
PAD District II Total	41	37	4	3,174,143	107,000	3,320,403	115,000
Alabama	6	6	0	180,600	0	187,300	0
Arkansas	3	3	0	51,400	7,000	53,000	8,000
Louisiana	23	20	3	2,262,207	359,000	2,773,775	414,875
Mississippi	6	6	0	368,400	0	390,900	0
New Mexico	4	4	0	75,600	0	84,607	0
Texas	36	32	4	3,902,900	236,100	4,170,400	247,000
PAD District III Total	78	71	7	6,841,107	602,100	7,245,107	669,875
Colorado	2	2	0	76,500	0	80,000	0
Montana	5	4	1	130,450	13,400	135,000	14,000
Utah	6	6	0	154,500	0	160,000	0
Wyoming	6	5	1	164,555	350	170,700	400
PAD District IV Total	19	17	2	526,005	13,750	545,300	14,400
Alaska	6	6	0	222,700	0	238,260	0
California	33	31	2	2,259,600	119,600	2,395,509	132,800
Hawaii	2	2	0	115,900	0	118,000	0
Nevada	1	1	0	4,500	0	4,700	0
Oregon	1	1	0	0	0	0	0
Washington	7	7	0	451,900	0	470,754	0
PAD District V Total	50	48	2	3,054,600	119,600	3,227,223	132,800
United States Total	213	195	18	15,017,968	897,450	15,831,558	993,075

(1) Refineries where distillation units are completely idle but not permanently shutdown on January 1, 1988.

Source: U.S. Energy Information Administration, Petroleum Supply Annual

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1988

District and State	Charge Capacity (Barrels Per Stream Day)						
	Vacuum Distillation	Thermal Operation	Catalytic Cracking (Fresh)	Catalytic Cracking (Recycled)	Catalytic Reforming	Catalytic Hydrocracking	Catalytic Hydrotreating
Delaware	95,000	46,000	65,000	5,000	56,000	19,000	110,000
Florida	11,390	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	3,153
New Jersey	244,100	21,500	251,000	37,000	77,500	0	284,500
New York	27,000	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
Pennsylvania	319,300	0	259,300	12,300	207,690	51,000	475,020
Virginia	29,000	13,500	27,000	2,000	9,500	0	25,000
West Virginia	9,675	0	0	0	3,750	4,440	0
PAD District I Total	735,465	81,000	602,300	56,300	354,440	74,440	897,673
Illinois	337,600	120,700	339,000	7,400	280,300	66,500	548,100
Indiana	204,200	27,500	166,000	6,000	94,500	0	232,800
Kansas	119,650	53,000	124,500	10,000	99,300	3,190	188,300
Kentucky	92,000	57,600	100,000	0	53,500	0	170,300
Michigan	38,500	0	45,000	1,000	36,500	0	55,300
Minnesota	137,000	54,000	78,000	1,000	61,500	0	209,700
North Dakota	0	0	26,000	5,200	12,100	0	17,000
Ohio	185,000	31,200	177,000	25,300	161,600	87,000	190,000
Oklahoma	129,000	27,000	131,000	6,400	90,000	5,000	170,000
Tennessee	10,000	0	30,000	0	10,000	0	33,500
Wisconsin	20,500	0	9,700	1,000	8,000	0	14,800
PAD District II Total	1,273,450	371,000	1,226,400	63,300	907,300	161,690	1,829,800
Alabama	50,000	12,000	0	0	32,000	0	63,300
Arkansas	23,300	0	18,500	775	9,000	0	18,500
Louisiana	1,157,700	563,500	923,800	35,800	520,500	149,000	1,164,400
Mississippi	273,950	70,500	72,000	9,000	95,800	68,000	253,800
New Mexico	13,900	0	27,100	6,100	19,200	0	29,200
Texas	1,843,700	377,900	1,602,500	135,200	1,134,200	276,000	3,082,450
PAD District III Total	3,362,550	1,023,900	2,643,900	186,875	1,810,700	493,000	4,611,650
Colorado	23,000	0	23,500	1,000	17,500	0	27,500
Montana	53,250	9,900	52,100	6,600	37,800	4,900	121,400
Utah	45,380	8,500	54,800	10,600	28,550	2,000	39,250
Wyoming	75,000	9,000	62,000	12,200	32,250	0	48,800
PAD District IV Total	196,630	27,400	192,400	30,400	116,100	6,900	236,950
Alaska	6,000	0	0	0	12,000	9,000	0
California	1,329,150	496,000	637,150	22,050	558,950	391,100	1,387,430
Hawaii	58,000	13,000	22,000	3,000	12,000	15,900	15,500
Nevada	2,500	0	0	0	0	0	0
Oregon	16,000	0	0	0	0	0	0
Washington	218,500	68,000	100,000	19,500	119,800	52,000	190,800
PAD District V Total	1,630,150	577,000	759,150	44,550	702,750	466,000	1,593,730
United States Total	7,198,245	2,080,300	5,424,150	381,425	3,891,290	1,202,030	9,169,803

Source: U.S. Energy Information Administration, Petroleum Supply Annual.

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1989

District and State	Number of Operable Refineries			Crude Capacity			
				Barrels Per Calendar Day		Barrels Per Stream Day	
	Total	Operating	Idle(1)	Operating	Idle	Operating	Idle
Delaware	1	1	0	140,000	0	150,000	0
Georgia	2	1	1	33,079	28,000	35,000	29,000
New Jersey	6	6	0	400,000	0	434,000	0
New York	1	1	0	41,850	0	45,000	0
North Carolina	2	1	1	13,000	10,000	15,500	12,000
Pennsylvania	8	8	0	734,315	0	770,500	0
Virginia	2	2	0	54,700	0	57,000	0
West Virginia	2	2	0	16,808	0	17,500	0
PAD District I Total	24	22	2	1,433,752	38,000	1,524,500	41,000
Illinois	6	6	0	889,200	0	942,000	0
Indiana	5	4	1	430,400	1,500	444,100	2,500
Kansas	8	8	0	349,300	0	370,483	0
Kentucky	2	2	0	218,900	0	226,300	0
Michigan	3	3	0	113,500	0	121,000	0
Minnesota	2	2	0	247,100	0	264,220	0
North Dakota	1	1	0	58,000	0	60,000	0
Ohio	4	4	0	484,600	0	507,000	0
Oklahoma	6	6	0	381,500	0	399,200	0
Tennessee	1	1	0	58,000	0	60,000	0
Wisconsin	1	1	0	32,000	0	34,000	0
PAD District II Total	39	38	1	3,262,500	1,500	3,428,303	25,000
Alabama	5	4	1	153,600	9,500	159,300	10,000
Arkansas	3	3	0	58,400	7,000	61,000	8,000
Louisiana	22	20	2	2,627,147	341,000	2,791,400	394,500
Mississippi	6	6	0	368,400	0	390,900	0
New Mexico	4	4	0	75,600	0	84,607	0
Texas	34	32	2	4,079,000	182,050	4,326,300	192,800
PAD District III Total	74	69	5	7,362,147	539,550	7,813,507	605,300
Colorado	3	2	1	87,200	15,200	92,000	16,000
Montana	4	4	0	138,450	7,800	143,200	8,000
Utah	6	6	0	154,500	0	160,000	0
Wyoming	5	5	0	166,725	0	175,750	0
PAD District IV Total	18	17	1	549,875	23,000	570,950	24,000
Alaska	6	6	0	215,000	0	232,460	0
California	32	31	1	2,235,300	29,100	2,379,809	32,120
Hawaii	2	2	0	126,500	0	130,000	0
Nevada	1	1	0	4,500	0	4,700	0
Oregon	1	1	0	0	0	0	0
Washington	7	6	2	465,300	11,900	483,754	12,754
PAD District V Total	49	47	2	3,046,600	41,000	3,230,723	44,874
United States Total	204	193	11	15,654,874	643,050	16,567,983	717,674

(1) Refineries where distillation units are completely idle but not permanently shutdown on January 1, 1989.

Source: U.S. Energy Information Administration, Petroleum Supply Annual

Section VIII
Table 7c

NUMBER AND CAPACITY OF U.S. PETROLEUM REFINERIES
As of January 1, 1989

District and State	Vacuum Distillation	Thermal Operation	Catalytic Cracking (Fresh)	Catalytic Cracking (Recycled)	Catalytic Reforming	Catalytic Hydrocracking	Catalytic Hydrotreating
	Charge Capacity (Barrels Per Stream Day)						
Delaware	95,000	46,000	65,000	5,000	56,000	19,000	110,000
Georgia	0	0	0	0	0	0	3,153
New Jersey	244,100	21,500	251,000	37,000	77,500	17,000	284,500
New York	27,000	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
Pennsylvania	319,300	0	238,300	6,800	208,400	51,000	479,620
Virginia	29,000	13,500	27,000	2,000	9,750	0	25,250
West Virginia	8,175	0	0	0	5,300	0	0
PAD District I Total	722,575	81,000	581,300	50,800	356,950	87,000	902,370
Illinois	349,400	124,900	343,000	12,000	292,300	67,500	588,100
Indiana	233,200	28,500	167,000	6,000	99,500	0	233,700
Kansas	124,650	53,000	124,500	9,000	97,500	3,190	215,500
Kentucky	92,000	57,600	100,000	0	53,500	0	182,300
Michigan	38,000	0	45,000	1,000	33,000	0	60,300
Minnesota	167,000	54,000	78,000	1,000	65,500	0	221,000
North Dakota	0	0	26,000	5,200	12,100	0	16,600
Ohio	185,000	30,700	176,000	17,500	161,600	87,200	194,500
Oklahoma	142,000	27,000	132,500	6,400	91,100	4,500	158,000
Tennessee	12,000	0	30,000	0	10,000	0	35,000
Wisconsin	20,500	0	12,600	1,000	8,000	0	14,800
PAD District II Total	1,363,750	375,700	1,234,600	59,100	914,100	162,390	1,919,800
Alabama	50,000	12,000	0	0	26,000	0	59,300
Arkansas	23,300	0	18,500	775	9,000	0	18,500
Louisiana	1,144,700	545,500	846,800	12,300	524,200	149,000	1,246,275
Mississippi	273,950	70,500	72,000	9,000	96,000	68,000	254,000
New Mexico	13,900	0	27,100	6,100	19,200	0	29,200
Texas	1,777,700	373,800	1,583,500	128,300	1,143,500	296,000	3,103,150
PAD District III Total	3,283,550	1,001,800	2,547,900	156,475	1,817,900	513,000	4,710,425
Colorado	33,000	4,200	23,500	1,000	19,900	5,000	29,900
Montana	53,350	7,700	52,170	6,620	35,530	4,900	118,270
Utah	45,500	8,500	49,400	9,600	28,550	0	39,250
Wyoming	75,000	9,000	62,000	12,200	32,250	0	48,800
PAD District IV Total	206,850	29,400	187,070	29,420	116,230	9,900	236,220
Alaska	6,000	0	0	0	12,000	9,000	0
California	1,347,000	502,000	648,950	14,050	559,900	388,500	1,463,280
Hawaii	58,000	13,000	22,000	3,000	12,000	15,900	3,500
Nevada	2,500	0	0	0	0	0	0
Oregon	16,000	0	0	0	0	0	0
Washington	219,000	70,000	102,500	13,000	121,800	52,000	204,300
PAD District V Total	1,648,500	585,000	773,450	30,050	705,700	465,400	1,671,080
United States Total	7,225,225	2,072,900	5,324,320	325,845	3,910,880	1,237,690	9,439,895

Source: U.S. Energy Information Administration, Petroleum Supply Annual.

Section VIII
Table 8

OPERATING REFINERIES WORLDWIDE
(Barrels per Calendar Day)
(as of January 1, 1987)

Area/ Country	Number of Plants	Crude Capacity	Vaccuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro-cracking	Catalytic Hydro-refining	Catalytic Hydro-treating
Canada	27	1,759,700	602,600	76,100	370,300	345,100	150,800	23,200	704,950
Caribbean	8	1,392,300	580,300	125,000	79,000	183,340	15,000	244,500	496,950
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	121,000	59,300	--	12,000	5,800	15,000	10,000	15,700
Trinidad	2	300,000	171,000	18,000	25,000	31,000	--	104,500	41,800
Virgin Islands	1	600,000	190,000	40,000	--	125,000	--	130,000	290,000
Latin America	70	5,524,740	2,333,710	454,400	1,043,320	264,218	41,900	275,600	819,993
Brazil	13	1,321,100	685,200	41,100	321,900	21,600	--	--	132,700
Mexico	9	1,349,000	600,700	82,000	267,000	137,800	18,000	--	486,000
Venezuela	7	1,224,700	551,500	122,000	179,400	6,000	--	275,600	--
Europe	125	14,192,863	3,739,519	1,632,290	1,538,600	2,042,058	259,500	1,906,593	4,283,017
France	15	1,834,050	427,650	167,400	252,300	239,300	13,500	277,900	504,400
Germany (West)	19	1,719,800	537,300	269,400	186,200	317,000	96,200	326,700	690,950
Italy	21	2,678,700	708,700	345,130	276,000	296,600	55,000	298,600	591,400
Netherlands	7	1,400,800	253,370	148,710	125,500	150,400	30,000	183,200	511,820
Spain	10	1,305,000	291,800	124,000	92,500	187,100	15,000	156,100	284,000
United Kingdom	15	1,779,700	625,090	166,000	345,500	367,500	19,000	131,600	770,590
Middle East	42	4,357,097	1,085,214	236,999	146,260	447,925	386,810	607,329	689,460
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	618,000	217,000	--	30,000	51,000	159,000	337,000	36,000
Saudi Arabia	6	1,125,000	67,655	26,000	10,000	86,900	68,100	39,000	207,000
Asia-Pacific	106	10,400,180	2,618,577	471,043	868,908	1,093,230	226,630	1,812,430	3,153,680
India	12	991,070	331,007	104,730	129,408	26,690	6,500	13,800	71,820
Japan	46	4,790,050	1,532,940	80,520	502,750	561,420	50,950	1,497,500	1,943,910
Korea	6	862,000	35,500	30,000	--	63,200	7,000	21,000	95,000
Singapore	5	961,000	170,500	133,000	--	50,600	44,200	76,700	288,400
Africa	44	2,489,563	390,617	83,170	131,100	280,477	34,000	105,100	470,904
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	7	452,110	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	14,582	--	--	37,226
South Africa	5	388,500	177,000	59,500	81,400	57,800	18,000	66,300	125,150
TOTAL	422	40,116,443	11,350,537	3,079,002	4,177,488	4,656,348	1,114,640	5,974,752	10,618,954

Source: Oil and Gas Journal, "Worldwide Report" issue, December 30, 1986.

OPERATING REFINERIES WORLDWIDE
(Barrels per Calendar Day)
(as of January 1, 1988)

Area/ Country	Number of Plants	Crude Capacity	Vaccuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro-cracking	Catalytic Hydro-refining	Catalytic Hydro-treating
Canada	27	1,868,900	654,650	78,150	385,550	368,650	189,550	23,200	755,580
Caribbean	9	1,339,300	605,300	165,000	79,000	187,750	15,000	244,500	496,950
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	123,000	59,300	--	12,000	5,800	15,000	10,000	15,700
Trinidad	2	300,000	171,000	18,000	25,000	31,000	--	104,500	41,800
Virgin Islands	1	545,000	215,000	80,000	--	125,000	--	130,000	290,000
Latin America	67	5,648,548	2,428,735	484,700	1,093,335	289,118	41,900	296,100	544,753
Brazil	13	1,407,300	698,200	33,800	350,500	24,800	--	--	133,400
Mexico	9	1,354,000	600,700	82,000	267,000	157,800	18,000	--	207,000
Venezuela	6	1,201,100	560,600	138,000	193,100	6,000	--	296,100	--
Europe	120	14,279,635	4,718,469	1,781,130	1,729,350	2,082,262	261,500	1,964,670	4,315,658
France	14	1,940,600	678,600	163,550	288,800	258,700	13,500	262,300	552,400
Germany(W)	16	1,647,800	619,800	283,400	174,700	307,100	96,200	326,700	652,150
Italy	19	1,563,100	723,700	386,400	277,400	289,600	55,000	301,900	596,700
Netherlands	7	1,381,000	401,370	151,550	125,500	157,400	30,000	148,200	522,400
Spain	10	1,305,000	374,800	178,000	143,500	189,000	15,000	190,500	283,000
United Kingdom	15	1,802,700	806,090	152,000	392,000	367,500	21,000	115,600	776,590
Middle East	42	4,821,817	1,167,746	225,300	207,760	553,166	386,510	608,429	661,442
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	628,000	217,000	--	30,000	51,000	159,000	338,100	36,000
Saudi Arabia	7	1,375,000	271,655	27,000	76,000	178,000	65,100	39,000	314,000
Asia-Pacific	104	10,310,652	3,017,840	395,700	845,370	1,080,240	246,250	1,752,330	3,231,240
India	12	1,058,742	327,570	113,900	133,470	26,690	--	13,800	77,890
Japan	43	4,566,850	1,675,940	82,520	557,150	533,940	50,950	1,393,200	2,083,660
Korea	5	820,000	33,400	30,000	--	59,450	7,000	21,000	92,800
Singapore	5	858,000	256,100	137,700	--	54,300	48,100	83,600	235,400
Africa	41	2,806,200	344,037	87,170	142,040	296,582	31,500	101,600	555,412
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	7	452,110	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	14,582	--	--	37,226
South Africa	4	433,500	104,000	63,500	84,400	62,800	18,000	77,300	142,150
TOTAL	410	40,862,752	13,091,337	3,334,349	4,582,425	4,857,768	1,172,210	5,241,729	10,761,035

Source: Oil and Gas Journal, "Worldwide Report" issue, December 28, 1987.

OPERATING REFINERIES WORLDWIDE(1)
(Barrels per Calendar Day)
(as of January 1, 1989)

Area/ Country	Number of Plants	Crude Capacity	Vacuum Distillation	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Hydro-cracking	Catalytic Hydro-refining	Catalytic Hydro-treating
Canada	27	1,855,800	657,850	88,200	387,600	369,600	206,350	51,000	771,600
Caribbean	11	1,385,000	605,200	165,000	82,000	194,900	15,000	246,500	502,700
Netherland Antilles	1	320,000	158,000	67,000	42,000	15,000	--	--	121,500
Puerto Rico	2	123,000	59,300	--	12,000	5,800	15,000	12,000	--
Trinidad	2	300,000	171,000	18,000	28,000	31,000	--	104,500	41,800
Virgin Islands	1	545,000	215,000	60,000	--	125,000	--	130,000	290,000
Latin America	66	5,598,438	2,427,796	490,600	1,105,710	287,560	41,900	546,100	529,419
Brazil	13	1,407,300	698,000	33,800	350,500	24,800	--	--	133,400
Mexico	9	1,354,000	600,700	82,000	267,000	157,800	18,000	250,000	207,000
Venezuela	6	1,201,100	560,000	138,000	193,100	6,000	--	296,100	--
Europe	118	13,946,005	4,588,919	1,733,230	1,833,840	1,978,012	274,000	1,943,770	4,299,018
France	14	1,875,970	684,500	152,850	319,200	247,000	13,500	264,900	523,000
Germany (W)	15	1,518,200	608,700	289,500	179,400	275,100	96,200	296,400	624,200
Italy	19	2,450,200	590,100	360,400	278,300	284,300	59,000	337,100	579,200
Netherlands	7	1,380,700	399,370	154,360	125,500	166,000	30,000	148,200	522,620
Spain	10	1,285,000	388,800	173,000	164,000	171,600	15,000	192,100	278,900
United Kingdom	15	1,803,100	806,840	152,000	442,000	307,500	21,000	115,600	776,590
Middle East	43	5,076,430	1,471,957	297,684	222,788	538,519	403,080	486,992	1,108,999
Iran	4	530,000	215,200	80,800	--	63,845	93,180	3,120	34,225
Kuwait	4	817,000	338,000	54,000	42,000	33,000	170,000	205,000	263,000
Saudi Arabia	7	1,375,000	280,655	32,000	76,000	180,900	70,100	40,000	340,000
Asia-Pacific	102	10,064,786	3,005,841	506,490	987,503	1,096,190	324,450	1,756,360	3,010,560
India	12	1,051,441	332,996	110,670	133,953	26,030	6,000	13,800	77,630
Japan	41	4,362,750	698,940	82,800	596,950	531,650	101,750	1,370,280	1,973,740
Korea	6	880,000	67,000	49,000	--	62,000	29,000	21,000	110,800
Singapore	5	852,000	256,000	137,700	--	58,000	48,100	80,600	243,400
Africa	44	2,786,987	397,217	94,170	174,000	331,182	31,500	105,700	551,248
Algeria	4	464,700	15,000	--	--	55,600	--	--	23,600
Egypt	8	489,203	46,725	16,470	--	30,940	--	--	84,386
Libya	3	329,400	3,432	--	--	13,982	--	--	37,126
South Africa	4	433,500	104,000	63,500	84,400	62,800	18,000	77,300	142,150
TOTAL	411	40,713,446	13,154,780	3,375,424	4,793,451	4,796,013	1,296,280	5,136,422	10,773,544

(1) Excluding the United States.

Source: Oil and Gas Journal, "Worldwide Report" issue, December 26, 1988.

Section VIII
Table 9

NELSON REFINERY OPERATING COST INDEXES
(1956 = 100)

Year	Fuel and Power Cost	Wage Rate	Productivity of labor	Labor Cost	Investment Related	Chemicals and Catalyst	Nelson Operating Indexes Refineries	Nelson Operating Indexes Processes
1956	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1957	115.1	104.1	98.1	106.1	105.4	102.2	106.7	107.7
1958	102.1	105.4	100.3	105.0	109.5	104.4	105.8	105.8
1959	103.5	111.5	109.0	102.3	113.7	107.8	106.8	106.0
1960	109.9	113.0	112.9	100.3	116.9	114.3	108.8	107.2
1961	106.7	119.2	122.3	97.5	119.2	103.2	106.7	106.4
1962	100.9	123.9	131.8	93.9	121.7	96.7	103.7	103.6
1963	104.4	129.1	142.7	90.5	115.2	95.6	100.8	100.6
1964	102.8	132.8	149.1	89.1	114.5	99.0	100.2	100.5
1965	106.1	138.8	157.2	88.3	116.0	119.3	104.6	106.2
1966	105.6	145.4	165.9	87.7	103.2	130.9	102.8	100.3
1967	104.7	152.4	165.1	92.3	103.6	128.6	104.1	101.2
1968	103.8	158.0	173.1	91.8	103.6	124.3	103.5	101.3
1969	107.1	171.3	187.6	91.3	104.3	125.9	104.3	102.5
1970	129.2	183.1	179.9	101.8	115.7	127.4	113.9	117.6
1971	166.4	194.9	185.6	105.0	115.7	120.1	117.4	133.3
1972	166.8	210.0	197.0	107.1	162.3	112.2	118.5	147.0
1973	186.8	221.2	214.9	102.9	193.0	117.3	125.7	168.0
1974	310.5	243.9	201.5	121.1	215.8	153.2	159.7	222.5
1975	376.8	273.9	206.0	133.0	246.5	196.7	189.3	258.5
1976	384.5	314.3	216.2	145.5	252.6	195.2	209.3	267.1
1977	430.5	346.2	231.4	149.6	263.6	184.4	228.2	287.8
1978	422.4	388.6	229.4	169.6	280.7	191.8	243.2	297.0
1979	605.7	424.8	222.5	191.1	300.2	216.6	278.3	374.4
1980	810.5	439.9	226.3	200.6	325.2	229.2	312.7	457.5
1981	1,016.0	512.8	188.8	271.9	357.2	237.7	373.3	562.2
1982	931.9	574.7	178.6	321.8	384.1	234.1	396.6	557.2
1983	913.8	621.9	186.7	334.5	415.3	231.3	412.9	565.5
1984	968.3	629.9	204.5	308.0	436.6	233.4	417.4	584.2
1985	878.9	642.3	219.7	293.4	445.8	222.9	406.8	551.7
1986	548.8	651.8	253.8	259.4	460.0	206.7	369.0	430.8
1987	554.1	663.2	261.8	253.5	473.2	192.8	371.8	435.6
1988	445.2	689.8	264.6	260.8	489.3	213.9	373.7	405.3

Source: Oil and Gas Journal.

Section VIII
Table 10

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
PAD District I					
American Refining Group, Inc.	Indianaola, Pa.	180	03/84	12/85	3
Amoco Oil Co.	Baltimore, Md.	15,000	01/82	03/82	25+
Ashland Oil Inc.	Buffalo, N.Y.	64,000	07/82	12/84	36+
Ashland Oil Inc.	Freedom, Pa.	6,800	04/85	12/85	37+
ATC Petroleum Inc.	Newington, N.H.	13,400	07/81	12/81	7
ATC Petroleum Inc.	Wilmington, N.C.	11,900	07/81	12/81	8
Chevron U.S.A. Inc.	Baltimore, Md.	14,200	N.A.	N.A.	38
Elk Refining Co. (division of Pennzoil Co. Inc.)	Falling Rock, W.Va.	5,600	12/82	12/82	25+
Manatee Energy Co.	Port Manatee, Fl.	28,400	05/81	10/81	2
Mobil Oil Corp.	Buffalo, N.Y.	43,000	05/81	07/81	25+
Quaker State Oil Refining Corp.	Emlenton, Pa.	0	12/83	12/83	25+
Virginia Oil & Refining Co., Inc.	Jonesville, Va.	1,000	N.A.	N.A.	2
TOTAL PAD I		203,480			
PAD District II					
Allied Materials Corp.	Stroud, Ok.	7,600	12/84	02/85	37+
Amoco Oil Co.	Sugar Creek, Mo.	104,000	05/82	06/82	25+
Amoco Oil Co.	Wood River, Il.	104,000	05/81	10/81	25+
Ashland Oil Inc.	Findlay, Oh.	20,400	02/82	12/84	36+
Ashland Oil Inc.	Louisville, Ky.	25,200	04/82	12/84	36+
B-T Energy Corp.	Louisville, Ky.	3,000	11/84	11/85	3
Champlin Petroleum Co.	Enid, Ok.	53,800	06/83	12/83	25+
Chevron U.S.A. Inc.	Cincinnati, Oh.	43,700	N.A.	N.A.	38+
Conoco Inc.	Wrenshall, Mn.	23,500	05/81	09/81	5
CRA, Inc.	Scottsbluff, Nb.	5,600	05/82	06/82	25+
Dillman Oil Recovery Inc.	Oblong, Il.	1,200	01/81	02/82	4+
Dow Chemical U.S.A.	Bay City, Mi.	20,000	05/80	09/81	25+
E-Z Serv Refining Inc.	Shallow Water, Kn.	9,500	04/81	02/82	25+
Energy Cooperative Inc.	East Chicago, In.	126,000	05/81	06/82	25+
Energy Development	Crossville, Il.	1,000	02/81	04/81	22
Flying J Petroleum Inc.	Williston, N.D.	4,600	N.A.	N.A.	32
Gladieux Refinery Inc.	Fort Wayne, In.	19,000	N.A.	N.A.	27+
Gulf Oil Corp.	Toledo, Oh.	50,300	06/81	11/81	25+
Hudson Refining Co. Inc.	Cushing, Ok.	19,000	12/82	11/83	6
Indiana Refining Inc.	Princeton, In.	5,000	12/80	02/81	23
Industrial Fuel and Asphalt of Indiana Inc.	Hammond, In.	7,600	12/81	06/82	25+
Lakeside Refining Co.	Kalamazoo, Mi.	5,600	N.A.	N.A.	39
Mid-America Refining Co. Inc.	Chanute, Kn.	3,000	03/81	07/82	25+
Mobil Oil Corp.	Augusta, Kn.	50,000	09/83	09/83	25+
Northland Oil and Refining Co.	Dickinson, N.D.	5,000	02/81	02/82	7
Oklahoma Refining Co.	Cyril, Ok.	12,750	12/84	12/84	36+
Okmulgee Refining Co.	Okmulgee, Ok.	25,000	06/82	12/82	25+
Phillips Petroleum Co.	Kansas City, Kn.	80,000	08/82	09/82	25+
Texaco Inc.	Lockport, Il.	72,000	04/81	10/81	25+
Texaco Refining and Marketing Inc.	Lawrenceville, Il.	79,000	04/85	12/85	37+
Texas American Petrochemical Inc.	West Branch, Mi.	11,500	09/81	02/82	25+
Tonkawa Refining Co.	Arnett, Ok.	12,000	06/84	09/84	16
Tosco Corp.	Duncan, Ok.	47,000	06/83	12/84	35
Wireback Oil Co.	Plymouth, Ok.	1,800	02/81	03/81	25+
TOTAL PAD II		1,058,650			

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 10a

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
PAD District III					
Adobe Refining Co., div. of Funding Systems Refining Corp.	La Blanca, Tx.	5,200	11/81	12/81	25+
Bayou State Oil Corp.	Hosston, La.	3,000	01/81	03/82	25+
Brio Refining Inc.	Friendswood, Tx.	12,500	09/82	12/82	4
Bronco Refining Co.	Houston, Tx.	2,250	04/81	07/82	1
Carbonit Refining Co.	Hearne, Tx.	11,000	02/81	12/81	6
Caribou-Four Corners Inc.	Farmington, N.M.	2,200	05/82	08/84	19
Celeron Oil and Gas Co.	Mermentau, La.	11,000	02/83	08/84	6
Clark Oil & Refining Corp.	Mt. Airy, La.	0	N.A.	N.A.	39
Clinton Manges	Palestine, Tx.	6,000	07/81	07/82	25+
Conoco Inc.	Alvin/Texas City, Tx.	33,274	10/85	12/85	22
Copano Refining Co.	Ingleside, Tx.	11,100	09/81	02/82	4
Damson Gas Processing Corp.	White Deer, Tx.	0	02/85	05/85	12
Dorchester Refining Co.	Mt. Pleasant, Tx.	26,500	09/84	12/84	36+
Dow Chemical U.S.A.	Freeport, Tx.	190,000	08/81	06/82	1
Eagle Refining Corp.	Jacksboro, Tx.	1,800	03/81	07/82	1
Eddy Refining Co.	Houston, Tx.	3,250	10/84	11/84	36+
Erickson Refining Corp.	Pt. Neches, Tx.	30,000	12/81	08/83	4
Evangeline Refining Co.	Jennings, La.	4,500	12/82	12/82	25+
Flint Chemical Co.	San Antonio, Tx.	1,500	01/85	03/85	23
Giant Industries Inc.	Farmington, N.M.	13,500	05/82	11/82	7
Gulf Oil Corp.	Venice, La.	28,700	04/81	12/81	13
Independent Refining Corp.	Winnie, Tx.	50,000	10/81	08/83	23
International Processors	St. Rose, La.	28,356	09/82	02/85	6
Lake Charles Refining Co.	St. Charles, La.	28,000	04/81	02/82	2
Longview Refining Co.	Longview, Tx.	14,000	12/81	04/82	25+
MacMillan Petroleum Co.	Norphlet, Ar.	5,800	N.A.	N.A.	39
Mallard Resources Inc.	Gueydan, La.	7,400	11/83	12/83	4
McTan Refining Corp.	St. James, La.	19,300	07/81	08/83	6
Mid-Gulf Energy Corp.	Ingleside, Tx.	39,400	10/83	05/84	6
Natchez Refining Co.	Natchez, Ms.	16,000	06/82	09/82	2
Petraco-Valley Oil Refining Co.	Brownsville, Tx.	12,300	03/83	12/83	5
Petromex Refining Co.	Houston, Tx.	2,000	N.A.	N.A.	4
Placid Oil Co.	Mont Belvieu, Tx.	8,500	01/82	07/82	2
Port Petroleum Inc.	Stonewall, La.	3,200	12/83	02/84	4
Quintana Petrochemical Co.	Corpus Christi, Tx.	33,300	07/84	09/84	30
Quitman Refining Co.	Quitman, Tx.	6,600	04/82	06/82	4
Rio Grande Crude Refining	Brownsville, Tx.	9,500	06/81	06/82	3
Rio Grande Recovery Systems Inc.	Brownsville, Tx.	1,000	05/81	02/82	2
Schulze Processing Inc.	Tallulah, La.	1,760	05/81	08/82	4
Shepard Oil Co.	Jennings, La.	10,000	05/81	02/82	4
Shore, Inc.	Kilgore, Tx.	550	03/83	07/83	3
Sooner Refining Co.	Darrow, La.	8,000	01/82	02/82	2
Southern Union Refining Co.	Monument, N.M.	5,400	01/81	10/81	25+
Southern Union Refining Co.	Lovington, N.M.	36,100	08/84	11/84	8
Southland Oil Co.	Yazoo City, Ms.	5,500	02/81	07/81	25+

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 10b

U.S. REFINERIES SHUTDOWN SINCE JANUARY 1, 1981

District/Refinery	Location	Crude Distillation Capacity (b/d)	Date of Last Operation	Date Shutdown	Years in Operation
Tesoro Petroleum Corp.	Carrizo Springs, Tx.	26,100	07/84	12/84	27
T & S Refining Co.	Jennings, La.	10,500	07/81	03/32	2
Texaco Refining and Marketing Inc.	Amarillo, Tx.	20,000	04/85	12/85	37+
Texas Refining Co.	Midland, Tx.	2,500	04/81	06/81	1
Texas Standard Refining Inc.	Houston, Tx.	1,800	01/81	10/81	*
Thriftway Oil Co.	Graham, Tx.	1,184	04/81	11/83	25+
Tipperary Refining Co.	Ingleside, Tx.	7,320	01/82	03/82	4
Tropicana Energy Co.	Ft. Worth (Euless), Tx.	4,650	12/83	12/85	19
Wickett Refining Co.	Wickett, Tx.	8,000	01/76	02/82	25+
TOTAL PAD III		831,294			
PAD District IV					
Caribou-Four Corners Inc.	Woods Cross, Ut.	8,400	12/82	12/84	21
C & H Refinery Inc.	Lusk, Wy.	180	01/81	02/82	25+
Gary Refining Corp.	Fruita, Co.	15,200	02/85	10/85	19
Glacier Park Co.	Osage, Wy.	10,000	02/81	03/82	4
Glenrock Refinery Inc.	Glenrock, Wy.	6,000	04/81	09/81	5
Husky Oil Co.	Cody, Wy.	11,500	06/82	09/82	25+
Kenco Refining Inc.	Wolf Point, Mt.	4,700	10/85	12/85	8
Morrison Petroleum Co.	Woods Cross, Ut.	6,000	12/85	12/85	11
Sage Creek Refining Co.	Cowley, Wy.	1,000	01/82	06/82	17
Silver Eagle Oil Co.	LaBarge, Wy.	3,000	N.A.	N.A.	13
Southwestern Refining Co.	La Barge, Wy.	1,040	04/81	08/81	7
Texaco Inc.	Casper, Wy.	21,000	03/82	07/82	25+
TOTAL PAD IV		88,020			
PAD District V					
Anchor Refining Co. Inc.	McKittrick, Ca.	9,000	11/82	02/84	6
Arizona Fuels Corp.	Fredonia, Az.	6,000	02/83	09/83	11
Beacon Oil Co.	Hanford, Ca.	17,300	N.A.	N.A.	27
Chevron U.S.A. Inc.	Bakersfield, Ca.	26,000	N.A.	N.A.	38+
Coastal Petroleum Refiners Inc.	Bakersfield, Ca.	10,000	06/85	12/85	6
ECO Petroleum Inc.	Long Beach, Ca.	0	07/81	03/84	8
Demenno-Kerdoon	Compton, Ca.	10,000	01/83	08/83	6
Golden Eagle Refining Co., Inc.	Carson, Ca.	16,170	11/84	02/85	37+
Marlex Oil & Refining Co.	Los Angeles, Ca.	21,100	01/84	03/84	7
Quad Refining Corp.	Bakersfield, Ca.	7,000	08/80	10/81	2
Road Oil Sales Inc.	Bakersfield, Ca.	6,000	01/81	12/81	9
Sabre Refining Inc.	Bakersfield, Ca.	10,000	N.A.	N.A.	16
Tosco Corp.	Bakersfield, Ca.	38,800	11/83	11/84	33
United Independent Oil Co.	Tacoma, Wa.	730	07/80	03/82	7
U.S.A. Petrochemical Corp.	Ventura, Ca.	24,000	12/84	12/84	7
Western Oil & Refining	Long Beach, Ca.	19,200	N.A.	N.A.	11
TOTAL PAD V		221,300			
TOTAL UNITED STATES		2,402,744			

* Less than one year.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section VIII
Table 11

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY
(Thousands of Barrels per Day)

1960		1970		1980	
Company	Capacity	Company	Capacity	Company	Capacity
Standard of New Jersey	961.7	Standard of New Jersey	1,087.0	Exxon	1,557.0
Texaco	724.0	Standard of Indiana	1,040.4	Standard of California	1,383.7
Socony-Mobil	716.7	Texaco	1,029.5	Standard of Indiana	1,238.0
Standard of Indiana	675.4	Shell	1,011.5	Shell	1,123.4
Standard of California	647.5	Standard of California	969.0	Texaco	1,059.0
Shell	594.0	Mobil	794.9	Gulf(1)	949.2
Gulf	500.6	Gulf(1)	751.6	Mobil	835.7
Sinclair	473.0	Atlantic Richfield	681.2	Atlantic Richfield	811.2
Cities Service	293.0	Sun	455.0	Sun(2)	521.5
Phillips	274.3	Union	444.0	Marathon	513.0
Sun	255.0	Standard of Ohio	439.0	Union	490.0
Tidewater	253.5	Phillips	398.0	Ashland	462.9
Continental	216.0	Ashland	318.3	Standard of Ohio	452.0
Atlantic	210.0	Continental	299.0	Conoco	448.1
Pure	187.0	Cities Service	281.0	Phillips	397.0
Union	181.0	Getty	207.0	Cities Service	291.0
Sunray Mid-Continent	171.0	Marathon	205.0	Union Pacific	283.8
Standard of Ohio	170.5	Coastal States Gas	135.0	Coastal	278.0
Ashland	168.5	Amerada Hess	125.0	Getty	261.5
Richfield	165.0	Union Pacific	122.5	Tosco	260.5
U.S. TOTAL	9,629.7	U.S. TOTAL(3)	12,811.0	U.S. TOTAL(3)	18,279.3

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(1) Includes volumes from Gulf's Bayamon refinery in Puerto Rico.
(2) Includes volumes from Sun's Yabucoa refinery in Puerto Rico.
(3) Includes Puerto Rico.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

Section VIII
Table 11a

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY
(Thousands of Barrels per Day)

1983		1984		1985	
Company	Capacity	Company	Capacity	Company	Capacity
Standard of California	1,296.5	Chevron(5)	2,029.3	Chevron(1)(5)	1,879.2
Exxon	1,200.0	Exxon	1,182.0	Exxon	1,200.0
Standard of Indiana	1,011.0	Shell	1,005.0	Shell	1,019.6
Shell	1,005.2	Standard of Indiana	986.0	Amoco (Std. of Ind.)	982.0
Gulf(1)	849.2	Texaco(6)	939.0	Texaco	873.2
Texaco	815.0	Mobil	750.0	Mobil	755.0
Mobil	750.0	Atlantic Richfield	741.0	Standard Oil (Ohio)	664.5
Atlantic Richfield	701.0	U.S. Steel	492.5	Atlantic Richfield	655.0
U.S. Steel	492.5	Standard of Ohio	456.0	U.S. Steel	492.5
Standard of Ohio	456.0	Sun(2)	443.0	Unocal	474.5
Sun(2)	443.0	DuPont	429.8	Sun(2)	443.0
DuPont	415.8	Ashland	353.3	DuPont	400.0
Unocal(3)	370.5	Unocal	339.0	Ashland	346.5
Ashland	353.3	Phillips	300.0	Phillips	300.0
Southland(Citgo)(4)	297.0	Southland	297.0	Southland	297.0
Phillips	295.0	Koch	262.0	Koch Industries	280.0
Getty	258.6	Union Pacific	217.0	Coastal	261.3
Koch	242.0	Coastal	171.3	Union Pacific	220.0
Union Pacific	215.0	Kerr-McGee	164.8	Kerr-McGee	164.8
Coastal	171.3	Tosco	164.5	Total	152.0
U.S. TOTAL(7)	14,949.1	U.S. TOTAL(7)	14,481.6	U.S. TOTAL(7)	14,761.5

(1) Includes volumes from Gulf's Bayamon refinery in Puerto Rico.
(2) Includes volumes from Sun's Yabucoa refinery in Puerto Rico.
(3) Unocal Corporation is the parent of Union Oil Company of California.
(4) Southland acquired the refining, marketing and transportation sections of Citgo Petroleum Corp., a subsidiary of Occidental, on September 1, 1983.
(5) Standard Oil of California acquired the Gulf Corporation on June 15, 1984 and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure reflects this acquisition which also includes volumes from a refinery in Bayamon, Puerto Rico.
(6) Texaco acquired Getty Oil Company on March 1, 1984. Texaco's figure reflects this acquisition.
(7) Includes Puerto Rico.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1985, Discussion Paper #014R.

Section VIII
Table 11b

TWENTY LEADING COMPANIES
U.S. REFINING CAPACITY(1)
(Thousands of Barrels per Day)

1986		1987	
Company	Capacity	Company	Capacity
Chevron(2)	1,845.0	Chevron	1,718.6
Exxon	1,143.5	Exxon	1,169.0
Shell	1,045.8	Shell	1,065.7
Amoco	967.0	Amoco	939.0
Texaco	886.0	Texaco	881.5
Mobil	755.0	Mobil	755.0
ARCO (Atlantic Richfield)	673.0	ARCO	668.0
Standard Oil	667.6	BP America (Standard Oil)(4)	667.6
USX (U.S. Steel)	513.0	USX	513.0
Unocal	490.0	Unocal	497.0
Sun(3)	443.0	Sun(3)	460.0
DuPont	393.2	DuPont	394.3
Ashland	346.5	Ashland	346.5
Coastal	318.3	Phillips	305.0
Phillips	305.0	Coastal	290.4
Citgo (Southland)	297.0	Koch	280.0
Koch Industries	280.0	Petroleos de Venezuela(5)	226.1
Union Pacific	218.4	Total Petroleum	191.1
Kerr-McGee	155.8	Kerr-McGee	164.8
Solomon (Philbro)	154.4	Solomon	155.7
U.S. TOTAL	15,067.8	U.S. TOTAL	15,139.0

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(1) Operating capacities of refineries in the U.S. and Puerto Rico as of January 1, 1987. Excludes Guam and Virgin Island operations.
(2) Includes 38 mbd from a refinery in San Juan, Puerto Rico.
(3) Includes 85 mbd from a refinery in Yabucoa, Puerto Rico.
(4) BP America was formed in 1987 through the acquisition of The Standard Oil Company by BP North America Inc.
(5) Petroleos de Venezuela, the Venezuelan national oil company, owns one-half of Citgo Petroleum and one-half of Champlin Refining Company. In 1987, Citgo's operable refining capacity averages 297,000 b/d, and Champlin's averaged 155,200 b/d.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion Paper #014R.

Section VIII
Table 12

U.S. GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION
(As of January 1)

State	1984			1985			1986		
	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gas/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)
AL	5	182.0	599.6	5	182.0	403.2	5	167.0	401.2
AK	2	62.0	56.8	2	62.0	50.3	2	82.0	39.0
AR	3	130.0	82.9	5	1,005.0	104.6	6	962.5	104.6
CA	37	1,483.1	1,280.1	34	1,167.6	1,267.3	36	1,066.0	1,038.3
CO	44	858.0	1,008.7	43	876.2	1,085.2	47	1,004.9	1,038.3
FL	3	961.5	374.0	3	934.0	353.9	3	799.0	454.8
IL	2	551.5	985.8	2	551.5	985.2	0	0	0
KS	25	4,901.5	1,942.4	27	5,124.0	2,480.2	28	5,646.0	2,280.8
KY	2	897.6	431.2	2	916.0	440.9	3	916.0	481.0
LA	106	22,194.5	9,852.3	97	22,983.5	11,253.5	94	20,366.4	10,085.2
MI	6	449.4	926.4	9	675.4	1,095.0	26	4,734.9	963.8
MS	7	1,005.0	51.6	6	995.0	55.1	6	995.0	55.5
MT	8	58.0	95.8	9	70.0	113.1	9	70.0	120.0
NE	2	13.5	11.9	2	13.5	11.6	2	13.5	10.5
NM	44	3,683.3	3,845.4	39	3,255.2	3,954.7	34	3,141.6	3,461.7
ND	9	306.8	520.3	11	314.2	663.0	10	284.3	537.6
OK	104	4,857.6	5,570.3	110	4,884.9	6,243.9	108	4,989.8	5,692.2
TX	415	23,504.8	24,782.4	399	21,071.0	26,638.5	384	19,630.8	26,548.6
UT	10	520.5	372.3	11	521.5	377.6	11	531.5	340.9
WV	6	410.0	698.0	6	416.0	715.9	7	430.0	794.4
WY	40	1,912.6	1,683.1	39	1,815.2	1,801.6	41	1,897.9	1,627.7
TOTAL U.S.	880	68,943.0	55,171.3	861	67,883.7	60,094.3	862	67,729.1	56,378.1

(1) Products include ethane, propane, butane, normal or unsplit butane LP-gas mix, raw NGL mix, debut natural gasoline and other.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

U.S. GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION
(As of January 1)

State	1987 No. of Plants	1987 Gas Capacity (MMcfd)	1987 Product Production(1) (000 gal/day)	1988 No. of Plants	1988 Gas Capacity (MMcfd)	1988 Product Production(1) (000 gas/day)
AL	5	173.0	379.3	6	177.0	412.0
AK	3	3,382.0	41.3	4	3,385.5	2,188.4
AR	5	953.0	94.1	5	943.0	76.4
CA	36	1,015.2	1,277.0	36	1,028.9	1,299.1
CO	43	1,016.2	887.1	37	925.2	770.1
FL	2	790.0	428.6	2	790.0	409.4
KS	26	5,429.5	2,264.6	25	5,592.5	2,615.8
KY	2	71.0	214.8	2	71.0	162.6
LA	86	19,941.6	10,129.7	79	19,492.5	10,197.9
MI	27	4,744.6	1,021.1	28	4,744.1	939.1
MS	5	899.0	45.9	6	901.0	54.8
MT	7	52.0	86.5	6	22.0	76.0
NE	2	3.5	6.5	2	3.5	7.2
NM	30	3,435.4	4,566.4	27	3,310.8	4,281.5
ND	11	346.7	558.5	9	308.0	483.4
OK	109	4,949.0	5,432.2	106	4,571.4	5,787.0
PA	0	0	0	2	14.0	11.3
TX	357	19,045.5	25,659.2	325	17,802.2	24,981.7
UT	11	516.5	318.4	11	485.5	399.8
WV	7	379.0	766.5	7	399.0	730.9
WV	36	1,668.4	1,459.7	39	2,864.0	5,048.0
TOTAL U.S.	810	68,811.1	63,850.0(2)	764	67,831.1	68,240.4(2)

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(1) Products include ethane, propane, butane, normal or unsplit butane LP-gas mix, raw NGL mix, debut natural gasoline and other.
(2) Includes data from Phillips Petroleum Co., Bartlesville, Okla., not provided in state-by-state totals.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

WORLD GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION(1)
(As of January 1)

Country	1984			1985			1986		
	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)
Abu Dhabi	4	2,048.0	2,790.3	5	2,498.0	1,179.3	5	2,498.0	1,179.3
Algeria	4	5,335.2	6,082.0	4	5,335.2	6,082.0	4	5,335.2	6,082.0
Argentina	11	1,715.9	1,656.2	11	1,715.9	1,656.2	11	1,715.9	1,701.7
Australia	4	1,707.0	1,932.0	4	1,707.0	1,920.0	5	2,070.0	6,284.0
Austria	2	5.7	0.9	2	5.7	0.3	2	5.7	0
Bahrain	1	127.7	353.8	1	145.0	354.9	1	143.0	335.4
Bangladesh	0	0	0	8	460.0	16.2	8	460.0	16.2
Bolivia	2	474.0	32.6	2	474.0	32.6	2	474.0	32.6
Brazil	5	295.3	448.6	5	312.0	598.3	6	369.4	711.7
Brunei	1	48.0	49.6	2	998.0	314.4	2	998.0	319.6
Canada	346	19,465.3	14,209.1	385	22,001.8	15,133.4	403	22,807.9	17,381.7
Chile	2	445.0	436.1	2	470.0	452.0	2	470.0	452.0
China, Taiwan	4	271.0	132.5	4	271.0	132.5	4	271.0	110.3
Colombia	2	125.0	187.0	2	125.0	187.0	2	125.0	157.9
Denmark	0	0	0	1	405.0	0	1	405.0	0.9
Dominican Rep.	1	0	277.2	1	0	277.2	1	0	277.2
Dubai	0	0	0	1	330.0	1,176.0	1	330.0	1,016.4
Ecuador	2	0	11.5	2	0	11.5	2	0	11.5
Egypt	4	553.0	1,797.1	7	826.0	928.3	7	969.0	1,122.2
France	1	1,024.0	761.0	1	900.0	740.0	1	777.0	666.0
Germany	5	542.9	0	5	542.9	0	5	542.9	0
Greece	1	9.8	16.0	2	39.0	83.0	1	10.5	85.0
Hungary	12	732.7	831.4	12	788.5	911.2	12	855.9	1,068.4
Indonesia	5	587.8	1,005.2	10	833.2	1,639.9	10	884.3	1,446.5
Italy	14	5,560.0	491.9	16	7,101.0	220.0	16	7,101.0	220.0
Kuwait	1	1,680.0	1,772.0	1	1,680.0	1,772.0	1	1,680.0	1,772.0
Libya	7	1,851.0	6,165.8	7	1,851.0	1,165.8	7	1,851.0	6,165.8
Malaysia	0	0	0	1	250.0	1,111.0	2	282.0	406.0
Mexico	9	3,807.0	10,679.8	9	3,807.0	10,679.8	10	4,334.0	10,017.3
Netherlands	1	330.0	6.3	1	440.0	6.0	1	440.0	4.2
New Zealand	1	96.0	26.5	1	96.0	34.7	1	96.0	34.7
Norway	0	0	0	1	350.0	160.0	2	950.0	368.4
Pakistan	5	1,215.0	32.2	5	950.0	62.4	5	950.0	62.4
Peru	3	50.0	44.2	3	70.0	28.1	2	70.0	38.7
Qatar	2	580.0	696.5	2	578.7	1,777.9	2	580.0	1,096.0
Saudi Arabia	5	4,300.0	1,176.0	5	4,300.0	1,176.0	5	4,300.0	1,176.0
Sharjah	1	250.0	1,316.0	1	500.0	2,436.0	1	580.0	2,520.0
United Kingdom	5	2,435.0	2,424.3	5	2,235.0	2,418.1	7	2,648.2	2,627.5
Venezuela	14	2,696.0	2,788.6	14	2,696.0	2,788.6	17	4,251.0	2,566.8
TOTAL (ex U.S.)	487	60,363.3	60,630.2	551	68,187.9	64,662.6	577	72,675.9	69,534.3

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(1) Products include ethane, propane, butane, normal or unsplit butane, LP-gas mix, raw NGL mix, debut natural gasoline and other.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

WORLD GAS PROCESSING CAPACITIES AND AVERAGE PRODUCTION(1)
(As of January 1)

	1987			1988		
Country	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)	No. of Plants	Gas Capacity (MMcfd)	Product Production(1) (000 gal/day)
Abu Dhabi	5	2,498.0	1,179.3	5	1,602.0	546.0
Algeria	4	5,335.2	6,082.0	4	5,335.2	6,082.0
Argentina	11	1,715.0	1,697.9	13	1,334.8	1,794.0
Australia	5	2,007.0	6,005.0	5	2,573.0	3,619.0
Austria	2	5.7	-	2	19.7	10.7
Bahrain	1	168.0	363.3	1	168.0	367.0
Bangladesh	8	460.0	16.2	2	240.0	8.2
Bolivia	2	474.0	364.0	2	474.0	364.0
Brazil	6	369.4	711.7	10	437.8	1,056.3
Brunei	2	998.0	344.0	2	1,032.0	304.1
Canada	419	23,460.2	15,835.3	449	24,656.6	16,683.7
Chile	2	470.0	422.0	2	470.0	420.8
China, Taiwan	4	271.0	106.3	4	271.0	106.3
Colombia	4	238.0	267.1	5	323.1	321.3
Denmark	1	450.0	50.0	1	450.0	100.0
Dominican Rep.	1	0	277.2	1	0	277.2
Dubai	1	330.0	820.0	1	330.0	772.0
Ecuador	2	0	11.5	2	41.0	134.4
Egypt	7	1,019.0	1,326.6	9	1,449.0	1,973.3
France	1	570.0	541.0	1	570.0	541.0
Germany	5	542.9	0	5	399.0	0
Greece	1	10.5	85.0	1	10.5	86.6
Hungary	12	947.1	1,065.3	12	1,078.1	1,153.8
Indonesia	10	884.3	1,542.6	8	630.5	980.6
Italy	17	7,249.0	194.1	17	7,166.0	63.7
Kuwait	1	1,680.0	1,772.0	1	560.0	3,513.8
Libya	7	1,851.0	6,165.8	7	1,851.0	6,165.8
Malaysia	2	282.0	465.0	2	282.0	465.0
Mexico	10	4,334.0	10,017.3	10	4,334.9	10,017.3
Netherlands	1	440.0	5.5	1	440.0	4.9
New Zealand	2	248.0	40.0	3	852.0	48.0
Norway	2	950.0	1,399.1	2	950.0	1,597.0
Oman	0	0	0	8	626.0	245.0
Pakistan	5	950.0	62.4	6	1,095.0	49.1
Peru	2	70.0	38.7	2	70.0	42.9
Qatar	2	560.0	1,028.1	2	579.0	932.2
Saudi Arabia	5	4,300.0	1,176.0	5	4,300.0	1,176.0
Sharjah	2	1,020.0	2,436.2	2	990.0	1,831.1
Spain	0	0	0	3	428.0	94.0
United Kingdom	7	2,648.2	2,567.9	10	4,070.2	2,489.8
Venezuela	17	4,251.0	2,566.8	14	2,913.0	4,201.9
TOTAL (ex U.S.)	598	74,056.5	69,048.2	643	75,411.5	70,621.8

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(1) Products include ethane, propane, butane, normal or unsplit butane, LP-gas mix, raw NGL mix, debut natural gasoline and other.

Source: Oil and Gas Journal, Annual Gas Processing Report issue.

BASIC PETROLEUM DATA BOOK

SECTION IX. IMPORTS

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Section IX
Table 1

THE SHARE OF IMPORTS IN U.S. DOMESTIC PETROLEUM DEMAND
(Thousands of Barrels)

Year	Imports	Domestic Demand For Refined Products	Imports as a % of Demand
1947	159,389	1,989,803	8.0
1948	188,144	2,113,678	8.9
1949	235,559	2,118,250	11.1
1950	310,261	2,392,974	13.0
1951	308,194	2,578,766	11.9
1952	348,507	2,668,134	13.1
1953	377,499	2,776,778	13.6
1954	383,955	2,833,896	13.5
1955	455,564	3,089,348	14.7
1956	525,591	3,214,651	16.3
1957	574,589	3,221,949	17.8
1958	620,589	3,327,993	18.6
1959	649,583	3,477,173	18.7
1960	664,111	3,585,820	18.5
1961	699,666	3,641,280	19.2
1962	759,793	3,796,029	20.0
1963	774,713	3,921,364	19.8
1964	826,736	4,034,236	20.5
1965	900,772	4,202,039	21.4
1966	939,162	4,410,796	21.3
1967	925,991	4,584,526	20.2
1968	1,039,369	4,901,789	21.2
1969	1,155,551	5,159,930	22.4
1970	1,248,062	5,364,473	23.3
1971	1,432,880	5,552,560	25.8
1972	1,735,314	5,990,316	29.0
1973	2,283,493	6,317,303	36.1
1974	2,230,947	6,078,239	36.7
1975	2,210,335	5,957,515	37.1
1976	2,676,411	6,390,750	41.9
1977	3,207,106(1)	6,727,468	47.7
1978	2,993,847(1)	6,879,017	43.5
1979	3,062,053(1)	6,757,077	45.3
1980	2,512,636(1)	6,242,445	40.3
1981	2,095,122(1)	5,861,058	35.7
1982	1,806,165(1)	5,582,938	32.4
1983	1,758,457(1)	5,559,364	31.6
1984	1,917,897(1)	5,755,575	33.3

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(1) Excludes crude oil imports into Strategic Petroleum Reserve: 1977 - 7,540; 1978 - 58,798; 1979 - 23,434; 1980 - 16,067; 1981 - 93,298; 1982 - 60,193; 1983 - 85,285; 1984 - 72,038

Source: U.S. Energy Information Administration; Annual Petroleum Statements.
1981-1984 - U.S. Energy Information Administration; Petroleum Supply Annu

Section IX
Table 1a

THE SHARE OF IMPORTS IN U.S. DOMESTIC PETROLEUM DEMAND
(Thousands of Barrels)

Year	Imports	Domestic Demand For Refined Products	Imports as a % of Demand
1985	1,806,304(1)	5,740,143	31.5
1986	2,254,019(1)	5,942,429	37.9
1987	2,410,842(1)	6,082,742	39.6
1988	2,690,382(1)	6,325,692	42.5

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(1) Excluded crude oil imports in Strategic Petroleum Reserve: 1985--43,124, 1986--17,563, 1987--26,517, 1988--18,758.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 2

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

Year	IMPORTS Crude Oil	Unfinished Oils	Plant Condensate	Refined Products	Total All Imports	Production Crude Oil and Condensate	Natural Gas Liquids	Total
1947	97,532	(1)	(2)	61,857	159,389	1,856,987	132,173	1,989,160
1948	129,093	(1)	(2)	59,051	188,144	2,020,185	146,721	2,168,906
1949	153,686	(1)	(2)	81,873	235,559	1,841,940	157,086	1,999,026
1950	177,714	(1)	(2)	132,547	310,261	1,973,574	181,961	2,155,535
1951	179,073	(1)	(2)	129,121	308,194	2,247,711	204,754	2,452,465
1952	209,591	(1)	(2)	138,916	348,507	2,289,836	223,515	2,513,351
1953	236,455	(1)	(2)	141,044	377,499	2,357,082	238,579	2,595,661
1954	239,479	(1)	(2)	144,476	383,955	2,314,988	252,133	2,567,121
1955	285,421	(1)	(2)	170,143	455,564	2,484,428	281,371	2,765,799
1956	341,833	(1)	(2)	183,758	525,591	1,617,283	292,727	2,910,010
1957	373,255	(1)	(2)	201,334	574,589	2,616,901	294,990	2,911,891
1958	348,007	(1)	(2)	272,582	620,589	2,448,987	294,749	2,743,736
1959	352,344	23,072	(2)	274,167	649,583	2,574,590	320,757	2,895,347
1960	371,575	16,478	(2)	276,058	664,111	2,574,933	340,157	2,915,090
1961	381,548	25,348	(2)	292,770	699,666	2,621,758	361,689	2,983,447
1962	411,039	32,516	(2)	316,238	759,793	2,676,189	372,705	3,048,894
1963	412,660	31,702	(2)	330,351	774,713	2,752,723	400,886	3,153,609
1964	438,643	32,587	(2)	355,506	826,736	2,786,822	422,471	3,209,293
1965	452,040	33,706	(2)	415,026	900,772	2,848,514	441,556	3,290,070
1966	447,120	35,236	(2)	456,806	939,162	3,027,763	468,635	3,496,398
1967	411,649	35,225	(2)	479,117	925,991	3,215,742	514,456	3,730,198
1968	472,323	29,350	(2)	537,696	1,039,369	3,329,042	550,311	3,879,353
1969	514,114	38,766	(2)	602,671	1,155,551	3,371,751	580,241	3,951,992
1970	483,293	39,261	2,258	723,250	1,248,062	3,517,450	605,916	4,123,366
1971	613,417	45,193	13,321	760,949	1,432,880	3,453,914	617,815	4,071,729
1972	811,135	45,705	31,428	847,046	1,735,314	3,455,368	638,216	4,093,584
1973	1,183,996	50,161	39,344	1,009,992	2,283,493	3,360,903	634,423	3,995,326
1974	1,269,155	44,228	32,364	885,200	2,230,947	3,202,585	616,098	3,818,683

(1) Separate data not available prior to 1959
(2) Separate data not available prior to 1970

SOURCE: U.S. Bureau of Mines, Crude Petroleum, Petroleum Products and Natural Gas Liquids, Annual and December issues

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

	IMPORTS					PRODUCTION		
Year	Crude Oil(3)	Unfinished Oils	Plant Condensate	Refined Products(4)	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1975	1,498,181	12,985	26,972	672,197	2,210,335	3,056,779	595,958	3,652,737
1976	1,935,012	11,735	24,408	705,256	2,676,411	2,976,180	587,045	3,563,225
1977	2,414,327	11,239	15,003	774,077	3,214,646	3,009,265	590,455	3,599,720
1978	2,319,826	9,913	6,017	716,889	3,052,645	3,178,216	572,086	3,750,302
1979	2,379,541	21,372	4,729	680,825	3,086,487	3,121,310	578,023	3,699,333
1980	1,926,162	20,015	3,781	598,745	2,548,703	3,146,365	575,787	3,722,152
1981	1,604,703	40,793	3,658	539,265	2,188,419	3,128,624	587,119	3,715,743
1982	1,273,214	63,657	2,292	527,195	1,866,358	3,156,715	565,876	3,722,591
1983	1,215,225	85,580	2,355	540,584	1,843,744	3,170,999	568,926	3,739,925
1984	1,253,949	84,496	N.A.	651,491	1,989,935	3,249,696	596,477	3,846,173
1985	1,168,297	115,979	N.A.	565,231	1,849,508	3,274,553	587,358	3,861,911
Jan.	84,217	4,815	N.A.	47,834	136,866	270,926	50,454	321,380
Feb.	59,015	6,446	N.A.	43,924	109,568	252,695	45,446	298,141
Mar.	86,364	9,109	N.A.	49,388	144,861	281,943	49,602	331,545
Apr.	102,045	12,106	N.A.	45,333	159,483	271,299	47,457	318,756
May	115,637	15,788	N.A.	47,640	179,065	283,093	49,408	332,501
Jun.	95,645	11,027	N.A.	41,206	147,878	270,653	47,909	318,562
Jul.	99,286	11,220	N.A.	42,931	153,437	277,410	48,606	326,016
Aug.	96,547	13,142	N.A.	36,559	146,248	272,881	49,423	322,304
Sep.	94,646	8,771	N.A.	45,696	149,113	268,610	47,252	315,862
Oct.	100,377	8,240	N.A.	50,136	158,754	278,068	49,914	327,982
Nov.	119,957	8,552	N.A.	54,974	183,483	267,059	49,808	316,867
Dec.	114,561	6,762	N.A.	59,428	180,750	279,916	52,079	331,995
1986	1,524,978	91,269	N.A.	655,335	2,271,582	3,168,252	566,000	3,734,252
Jan.	107,627	8,464	N.A.	56,663	172,754	283,248	53,031	336,279
Feb.	83,100	4,675	N.A.	43,166	130,941	256,855	47,495	304,350
Mar.	92,641	7,468	N.A.	45,965	146,074	279,413	49,734	329,147
Apr.	110,520	9,034	N.A.	43,629	163,183	265,917	45,686	311,603
May	131,757	9,928	N.A.	56,712	198,397	273,964	47,827	321,791
Jun.	139,053	7,720	N.A.	58,663	205,436	258,700	45,115	303,815
Jul.	146,509	6,956	N.A.	61,726	215,191	268,448	46,728	315,176
Aug.	150,637	6,233	N.A.	65,340	222,210	259,580	44,784	304,364
Sep.	150,923	7,879	N.A.	53,888	212,690	249,843	44,050	293,893
Oct.	136,983	7,138	N.A.	55,120	199,241	260,984	45,778	306,762
Nov.	138,444	8,284	N.A.	51,025	197,753	252,374	47,083	299,457
Dec.	136,784	7,490	N.A.	63,438	207,712	258,926	48,689	307,615

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(3) Includes crude oil imported into the Strategic Petroleum Reserve.
(4) Excludes unfinished oils and plant condensate.

SOURCE: 1975-1980--U.S. Energy Informaton Administration, Annual Petroleum Statements.
1981-1986--U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. IMPORTS OF PETROLEUM AND PETROLEUM PRODUCTION
(Thousands of barrels)

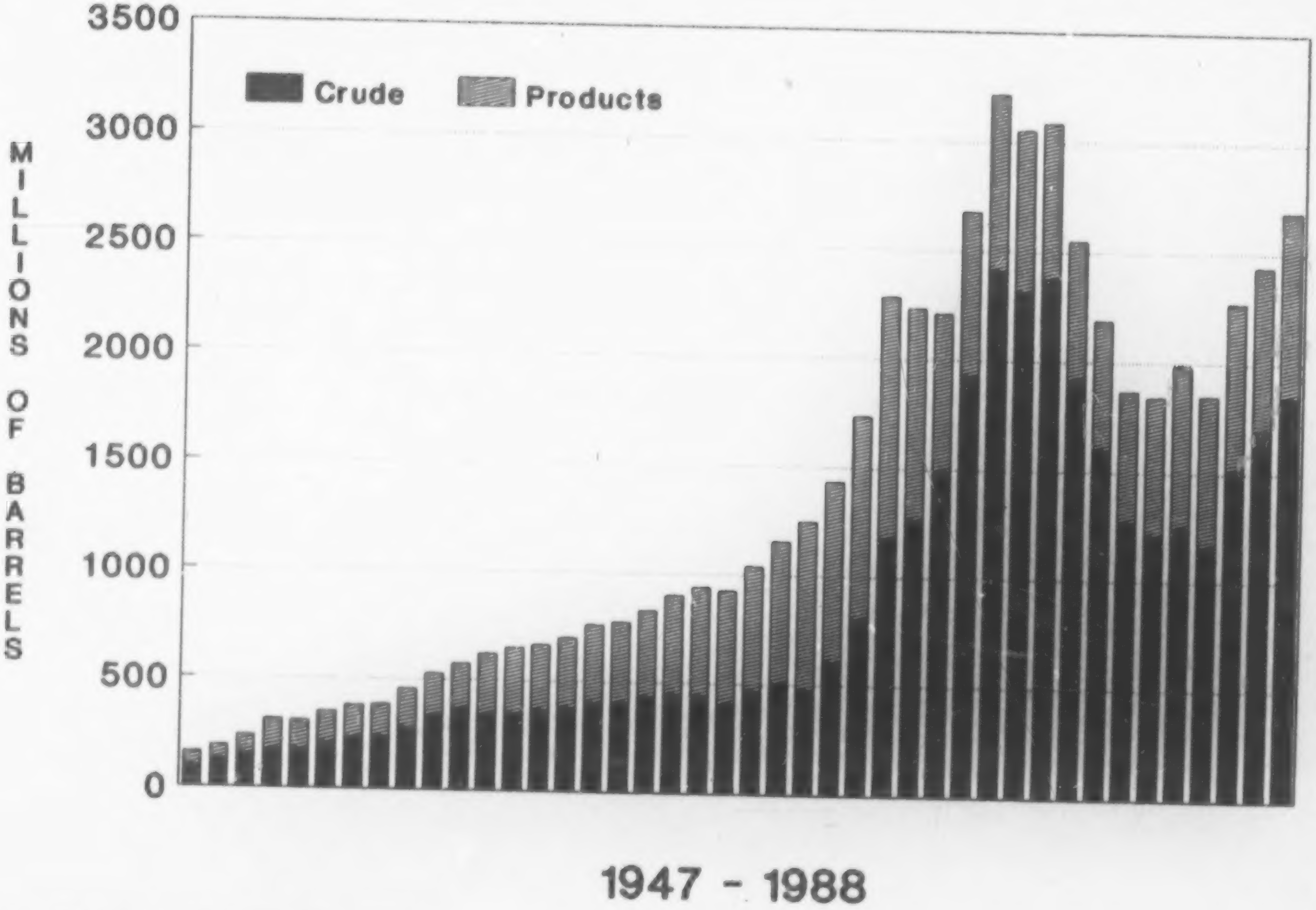
	IMPORTS					PRODUCTION		
Year	Crude Oil(3)	Unfinished Oils	Plant Condensate	Refined Products(4)	Total All Imports	Crude Oil and Condensate	Natural Gas Liquids	Total
1987	1,705,922	109,298	N.A.	622,139	2,437,378	3,047,378	582,291	3,629,669
Jan.	135,943	5,883	N.A.	55,122	196,948	262,888	49,055	311,943
Feb.	108,260	8,697	N.A.	50,608	167,565	234,880	45,306	280,186
Mar.	117,160	10,797	N.A.	51,655	179,612	262,398	49,529	311,927
Apr.	123,964	9,348	N.A.	44,023	177,335	254,945	47,688	302,633
May	134,549	8,745	N.A.	44,957	188,251	258,426	49,150	307,576
Jun.	144,197	12,906	N.A.	45,958	203,061	248,356	47,352	295,708
Jul.	164,131	7,786	N.A.	63,302	235,219	255,782	49,037	304,819
Aug.	170,802	8,448	N.A.	51,816	231,066	254,508	48,701	303,209
Sep.	153,312	8,179	N.A.	53,848	215,339	246,163	47,450	293,613
Oct.	159,390	9,800	N.A.	49.903	219,093	259,272	49,670	308,942
Nov.	150,389	8,310	N.A.	53,332	212,031	251,915	49,103	301,018
Dec.	148,825	10,399	N.A.	57,614	211,838	257,844	50,250	308,094
1988	1,869,005	131,599	N.A.	708,536	2,709,140	2,979,123	594,692	3,573,815
Jan.	144,515	12,045	N.A.	66,051	222,611	255,743	48,939	304,682
Feb.	134,863	8,508	N.A.	67,048	210,419	242,848	46,547	289,395
Mar.	150,912	9,546	N.A.	54,816	215,274	259,587	50,725	310,312
Apr.	155,012	12,957	N.A.	50,142	218,111	248,629	48,529	297,158
May	165,510	12,634	N.A.	53,389	231,533	255,089	50,442	305,531
Jun.	159,667	12,327	N.A.	45,173	217,167	245,102	48,477	293,579
Jul.	158,100	12,454	N.A.	55,650	226,204	249,229	50,156	299,385
Aug.	157,766	10,138	N.A.	61,053	228,957	250,459	50,096	300,555
Sep.	156,355	9,363	N.A.	59,451	225,169	236,847	48,630	285,477
Oct.	172,080	10,253	N.A.	60,395	242,728	248,704	51,496	300,200
Nov.	152,093	13,187	N.A.	66,145	231,425	240,700	49,993	290,963
Dec.	162,132	8,187	N.A.	69,222	239,541	246,189	50,662	296,851
1989								
Jan.	171,156	10,689	N.A.	67,394	249,239	245,313	51,246	296,559
Feb.	147,356	10,987	N.A.	63,114	221,457	219,245	44,839	264,084
Mar.	154,768	8,850	N.A.	65,547	229,165	235,922	50,167	286,989

(3) Includes crude oil imported into the Strategic Petroleum Reserve.
(4) Excludes unfinished oils and plant condensate.

SOURCE: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual and Monthlies.

Section IX
Table 2c

U.S. OIL IMPORTS



Source: Department of Energy

Section IX
Table 3

U.S. CRUDE OIL IMPORTS BY AREA
(Thousands of Barrels)

Year	Western Hemisphere	Africa	Middle East	All Others	Total
1947	97,146	--	386	--	97,532
1948	105,912	--	23,181	--	129,093
1949	116,736	--	36,950	--	153,686
1950	136,096	--	41,618	--	177,714
1951	138,074	--	37,501	3,498	179,073
1952	147,771	--	56,556	5,264	209,591
1953	141,552	--	80,930	13,969	236,451
1954	148,010	--	77,764	13,705	239,479
1955	173,166	--	100,344	11,941	285,451
1956	225,007	--	103,517	13,309	341,833
1957	261,736	--	87,798	23,719	373,253
1958	199,256	--	123,091	25,732	348,079
1959	212,707	--	115,875	23,762	352,344
1960	230,229	1,451	113,175	26,720	371,575
1961	237,995	1,887	118,997	22,669	381,548
1962	267,680	9,808	109,071	24,480	411,039
1963	278,933	9,173	103,214	21,340	412,660
1964	289,012	17,743	108,841	23,047	438,643
1965	283,377	24,585	121,908	22,170	452,040
1966	289,800	31,543	107,579	18,198	447,120
1967	301,002	20,151	67,977	22,519	411,649
1968	315,977	57,461	72,330	26,555	472,323
1969	337,847	82,380	61,616	32,271	514,114
1970	351,366	44,365	61,892	25,670	483,293
1971	378,102	68,361	124,155	42,779	613,397
1972	421,799	172,105	155,982	61,249	811,135
1973	532,238	285,481	292,988	73,289	1,183,996
1974	446,534	356,121	362,186	104,314	1,269,155

Source: U.S. Bureau of Mines, Crude Petroleum, Petroleum products and Natural Gas Liquids, Annual and December issues.

Section IX
Table 3a

U.S. CRUDE OIL IMPORTS BY AREA
(Thousands of Barrels)

Year	Western Hemisphere	Africa	Middle East	All Others	Total
1975	453,772	488,515	409,496	146,398	1,498,181
1976	316,202	716,661	681,189	220,965	1,935,012
1977	328,468	912,631	910,744	262,484	2,414,327
1978	345,624	830,773	832,305	311,124	2,319,826
1979	436,525	910,644	765,249	267,123	2,379,541
1980	379,813	731,342	561,248	253,759	1,926,162
1981	352,373	486,768	447,518	318,044	1,604,703
1982	430,885	282,706	248,560	311,163	1,273,214
1983	497,237	247,555	160,221	310,213	1,215,225
1984	508,983	225,929	168,336	350,701	1,253,949
1985	605,771	213,090	89,583	259,853	1,169,297
1986	670,239	266,946	300,207	287,586	1,524,978
1987	699,301	363,829	359,628	283,164	1,705,922
1988	737,577	370,000	512,685	248,743	1,869,005

Source: 1975-1980 -- U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1988 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 4

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Argentina	--	--	--	--	--	--	--	--	--	--
Bolivia	--	--	--	--	--	--	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	--
Canada	--	--	--	--	463	1,116	2,527	2,565	16,810	42,739
Chile	--	--	--	--	--	--	--	--	--	--
Colombia	10,944	8,542	11,678	16,159	16,312	16,209	15,860	12,415	8,125	9,009
Curacao and Aruba	5,125	4,707	613	611	--	--	--	371	487	--
Ecuador	--	--	--	--	--	--	90	300	474	368
Mexico	5,578	3,601	4,797	12,307	13,862	8,483	2,897	3,018	5,510	4,666
Peru	--	--	--	--	--	--	--	608	855	609
Trinidad	--	--	--	--	--	--	--	356	121	566
Venezuela	75,499	89,062	99,648	107,019	107,437	121,963	120,178	128,377	140,754	167,050
Total Western Hemisphere	97,146	105,912	116,736	136,096	138,074	147,771	141,552	148,010	173,136	225,007
Algeria	--	--	--	--	--	--	--	--	--	--
Angola	--	--	--	--	--	--	--	--	--	--
Egypt	--	--	--	--	--	--	--	--	--	--
Gabon	--	--	--	--	--	--	--	--	--	--
Libya	--	--	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--	--	--
Tunisia	--	--	--	--	--	--	--	--	--	--
Total Africa	--	--	--	--	--	--	--	--	--	--
Abu Dhabi	--	--	--	--	--	--	--	--	--	--
Iran	--	4,507	1,107	111	--	--	--	204	3,202	7,257
Iraq	--	766	341	--	--	705	2,287	2,188	6,988	9,650
Kuwait	111	3,442	23,445	26,741	21,601	26,444	38,611	41,046	48,954	50,953
Neutral Zone	--	--	--	--	--	--	--	2,983	6,639	3,072
Qatar	--	--	--	116	--	--	3,368	3,524	5,511	4,915
Saudi Arabia	275	14,466	12,057	14,650	15,900	29,407	36,668	27,819	29,050	27,670
Total Middle East	386	23,181	36,950	41,618	37,501	56,556	80,934	77,764	100,344	103,517
Borneo	--	--	--	--	3,498	1,624	--	--	--	--
Australia	--	--	--	--	--	--	--	--	--	--
Indonesia (Sumatra)	--	--	--	--	--	3,640	13,969	13,705	11,941	13,309
Malaysia										
Total Far East	--	--	--	--	3,498	5,264	13,969	13,705	11,941	13,309
U.S.S.R.	--	--	--	--	--	--	--	--	--	--
Total Eastern Hemisphere	386	23,181	36,950	41,618	40,999	61,820	94,903	91,469	112,285	116,826
ANNUAL TOTAL	97,532	129,093	153,686	177,714	179,073	209,591	236,455	239,479	285,421	341,833

Source: U.S. Bureau of Mines, Annual Petroleum Statements

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Argentina	--	--	--	--	--	--	--	--	--	--
Bolivia	--	--	--	--	--	--	--	--	--	1,237
Brazil	--	402	1012	309	1,776	1,277	2,052	--	--	--
Canada	53,804	30,621	33,902	40,866	65,819	85,152	90,394	101,607	107,762	126,712
Chile	--	--	--	--	--	--	--	--	--	--
Colombia	8,491	9,770	11,525	15,489	10,069	8,614	8,293	9,606	15,211	14,424
Curacao and Aruba	--	--	--	--	--	--	--	--	--	--
Ecuador	454	--	--	--	--	--	--	--	--	--
Mexico	3,187	999	229	766	6,835	3,644	3,657	3,577	2,552	--
Peru	--	--	--	--	--	--	--	--	--	--
Trinidad	1,175	329	92	219	172	--	--	--	--	--
Venezuela	208,642	191,559	195,240	200,528	180,387	168,993	174,537	174,222	157,852	147,427
Total Western Hemisphere	276,252	235,204	242,812	260,198	267,231	267,680	278,933	289,012	283,377	289,800
Algeria	--	--	--	284	--	1,543	380	2,249	3,256	1,400
Angola	--	--	--	--	--	--	--	--	--	--
Egypt	--	--	--	1,175	1,887	1,543	1,772	1,077	881	852
Gabon	--	--	--	--	--	--	--	--	--	--
Libya	--	--	--	--	--	6,722	7,021	14,417	15,152	25,177
Nigeria	--	--	--	--	--	--	--	--	5,296	4,114
Tunisia	--	--	--	--	--	--	--	--	--	--
Total Africa	--	--	--	1,459	1,887	9,808	9,173	17,743	24,585	31,543
Abu Dhabi/ United Arab Emirates(5)	--	--	--	--	--	--	--	1,112	5,035	4,781
Iran	5,176	5,829	9,699	11,170	22,780	17,735	22,717	24,143	28,633	30,833
Iraq	5,649	8,411	8,541	7,927	9,297	856	321	--	5,695	9,447
Kuwait	59,446	81,037	72,201	60,402	51,366	40,749	29,680	23,263	20,208	9,543
Neutral Zone	--	684	189	239	295	15,837	15,855	17,565	9,756	7,028
Qatar	2,257	1,538	733	1,408	12,999	9,535	5,835	7,294	4,346	176
Saudi Arabia	12,595	27,159	26,187	29,989	24,211	24,359	28,806	35,464	48,235	45,771
Total Middle East	85,123	124,658	117,550	111,135	120,371	109,071	103,214	108,841	121,908	107,579
Australia	--	--	--	--	--	--	--	--	--	--
Indonesia (Sumatra)	24,226	23,845	24,235	28,054	22,780	24,480	21,340	23,047	22,170	18,198
Malaysia	--	--	--	--	--	--	--	--	--	--
Total Far East	24,226	23,845	24,235	28,054	22,780	24,480	21,340	23,047	22,170	18,198
U.S.S.R.	--	--	--	--	--	--	--	--	--	--
Total Eastern Hemisphere	109,550	148,503	141,785	140,648	144,737	143,359	133,727	149,631	168,663	157,320
ANNUAL TOTAL	385,802	383,707	384,597	400,846	411,968	411,039	412,660	438,643	452,040	447,120

(5) Figures from 1947-1971 reflect Abu Dhabi only. Beginning 1972 Abu Dhabi, Dubai and Sharjah formed the United Arab Emirates.

Source: U.S. Bureau of Mines, December and Annual Petroleum Statements

Section IX
Table 4b

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Bolivia	7,016	6,866	5,596	534	798	--	891	2,467	1,940	1,849
Canada	150,409	169,418	203,298	245,258	263,294	312,440	365,370	288,763	219,175	135,690
Colombia	11,855	11,981	15,551	7,313	3,175	1,695	778	--	--	2,041
Ecuador	--	--	--	--	--	5,331	17,229	15,225	20,679	18,671
Mexico	--	--	--	--	--	--	489	597	25,660	31,670
Trinidad	--	--	--	265	--	8,626	21,739	23,045	42,097	38,142
Venezuela	131,089	125,737	111,722	97,996	110,574	93,300	125,742	116,437	144,221	88,139
Total Western Hemisphere	301,002	315,977	337,847	351,366	378,102	421,799	532,238	446,534	453,772	316,202
United Kingdom	--	--	--	--	--	--	--	--	125	4,923
Netherlands	--	--	--	--	--	--	--	--	1,500	--
Norway	--	--	--	--	--	--	--	322	4,552	12,881
Total Europe	--	--	--	--	--	--	--	322	6,177	17,804
Algeria	1,447	1,944	358	2,093	4,685	31,573	43,619	65,764	96,459	149,190
Angola	--	--	424	--	1,301	5,785	17,753	17,536	26,051	2,426
Congo (Brazzaville)	--	--	--	--	--	--	--	670	--	3,142
Egypt(UAR)	1,318	10,795	14,778	7,626	6,924	3,091	5,296	3,227	1,687	6,311
Gabon	661	--	--	--	--	--	--	8,552	9,811	9,685
Libya	15,293	41,591	48,862	17,156	19,426	40,069	48,585	1,495	81,403	162,457
Nigeria	1,432	3,131	17,958	17,490	34,826	88,887	163,687	254,358	272,265	370,962
Tunisia	--	--	--	--	1,199	2,520	6,541	4,519	839	5,400
Zaire	--	--	--	--	--	--	--	--	--	7,088
Total Africa	20,151	57,461	82,380	44,365	68,361	172,105	285,481	356,121	488,515	716,661
United Arab Emirates	1,936	5,605	5,051	23,047	29,026	26,873	25,764	25,158	42,585	93,105
Iran	23,781	21,154	15,306	12,184	38,576	49,700	78,990	168,956	101,575	109,073
Iraq	1,716	--	--	--	3,932	1,315	1,529	--	707	9,542
Israel	--	--	--	--	--	--	309	--	--	2,368
Kuwait	6,859	15,863	12,539	12,123	10,650	13,205	15,208	1,820	1,444	451
Oman	--	--	--	--	--	--	--	236	492	10,943
Qatar	--	--	191	--	--	1,263	2,663	6,189	6,657	8,631
Saudi Arabia	29,679	18,959	12,665	6,140	41,971	63,626	168,525	159,827	256,036	447,071
Total Middle East	67,977	72,330	61,616	61,892	124,155	155,982	292,988	362,186	409,496	681,184
Australia	--	--	--	--	2,567	327	--	--	--	--
Indonesia	22,519	26,555	32,271	25,670	40,232	59,633	73,055	103,482	138,270	196,599
Malaysia	--	--	--	--	--	966	234	510	1,951	5,914
Total Far East	22,519	26,555	32,271	25,670	42,799	60,926	73,289	103,992	140,221	202,513
U.S.S.R.	--	--	--	--	--	323	--	--	--	648
Total Eastern Hemisphere	110,647	156,346	176,267	131,927	235,315	389,336	651,758	822,621	1,044,409	1,618,810
ANNUAL TOTAL	411,649	472,323	514,114	483,293	613,417	811,135	1,183,996	1,269,155	1,498,181	1,935,012

Source: Energy Information Administration, Annual Petroleum Statements.
1981-1982 -- Energy Information Administration, Petroleum Supply Annual.

Section IX
Table 4c

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Bolivia	1,271	308	328	301	--	--	1,361	260	--	268
Canada	101,778	90,490	99,081	73,002	59,904	78,041	100,142	124,687	170,800	208,163
Colombia	--	--	--	--	--	--	--	--	--	20,715
Ecuador	20,229	13,910	11,010	6,129	13,967	11,788	20,594	17,066	20,334	23,408
Mexico	64,711	115,426	159,616	185,541	171,363	235,298	279,703	241,054	261,019	226,533
Trinidad & Tobago	48,841	51,974	44,950	42,011	37,186	33,541	30,207	31,939	35,595	34,060
Venezuela	91,331	66,125	106,794	56,950	53,590	56,434	59,854	92,728	111,827	151,937
Total Western Hemisphere	328,468	345,624	436,525	379,813	352,373	430,885	497,237	508,983	605,771	670,239
United Kingdom	35,583	61,555	71,923	63,459	134,766	161,061	133,142	138,246	101,552	115,659
Netherlands	1,509	846	2,685	22	1	3	1,039	1,046	--	--
Norway	17,628	37,815	27,523	52,727	41,452	37,299	23,836	40,927	11,311	19,403
Total Europe	54,720	100,216	102,131	116,208	176,315	198,365	193,529	180,219	113,096	135,062
Algeria	198,468	231,253	222,042	166,980	95,165	32,714	64,274	71,074	30,524	28,423
Angola	6,150	2,290	14,088	13,389	16,528	15,248	25,763	31,172	37,889	37,076
Congo	2,440	5,454	909	2,658	1,276	456	6,616	12,226	5,962	7,188
Egypt	13,034	7,395	20,205	11,249	12,155	14,683	8,958	3,485	956	3,620
Gabon	12,632	13,841	15,328	9,062	12,633	14,429	21,415	20,838	18,797	8,959
Libya	256,984	232,897	234,173	200,406	115,572	8,452	--	--	--	--
Nigeria	412,498	332,035	390,116	307,840	222,981	186,329	109,807	75,669	102,134	159,683
Tunisia	10,425	4,460	6,429	2,801	4,104	3,481	2,564	4	4,259	1,230
Zaire	--	263	1,379	4,690	5,977	6,914	8,158	11,460	12,569	9,490
Total Africa	912,631	830,773	910,644	731,342	486,768	282,706	247,555	225,929	213,090	266,946
United Arab Emirates	121,640	140,653	102,709	63,052	27,950	29,509	6,641	32,966	12,760	13,806
Iran	193,415	202,357	108,269	3,086	--	12,854	17,575	3,706	9,919	7,078
Iraq	26,894	22,673	32,052	10,328	--	974	[illegible]	4,554	16,889	29,401
Israel	--	--	--	--	--	--	--	--	--	--
Kuwait	15,434	1,718	1,898	9,712	--	904	2,641	8,780	1,316	10,106
Oman	27,140	22,240	13,466	8,693	8,702	8,183	12,281	3,755	655	2,897
Qatar	24,281	23,224	11,450	7,920	2,665	2,600	--	1,497	--	4,365
Saudi Arabia	501,072	416,910	491,514	457,671	406,059	193,536	117,325	113,078	48,044	225,627
Total Middle East	910,744	832,305	765,249	561,248	447,518	248,560	160,221	168,336	89,583	300,207
Australia	--	--	--	--	--	--	--	9,177	7,557	10,973
Indonesia	184,984	194,620	138,528	114,990	116,126	82,315	115,156	111,404	106,854	108,376
Malaysia	20,257	13,677	18,954	22,213	12,143	8,574	930	--	301	3,883
Total Far East	207,089	210,632	155,933	137,551	[illegible]	90,023	116,683	126,196	146,755	152,522
U.S.S.R.	675	276	--	--	--	--	--	--	--	2
Total Eastern Hemisphere	2,085,859	1,974,202	1,943,016	1,546,349	1,252,330	842,429	717,988	744,966	562,524	854,739
ANNUAL TOTAL	2,414,327	2,319,826	2,379,541	1,926,162	1,604,703	1,273,214	1,215,225	1,253,949	1,168,297	1,524,978

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 4d

U.S. IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN
(Thousands of Barrels)

AREA AND COUNTRY	1987	1988
Bolivia	--	--
Canada	221,980	249,077
Colombia	41,809	38,640
Ecuador	8,217	12,240
Mexico	219,552	246,545
Trinidad & Tobago	27,408	26,119
Venezuela	178,163	160,747
Total Western Hemisphere	699,301	737,577
United Kingdom	111,060	92,910
Netherlands	--	--
Norway	25,395	22,570
Total Europe	136,665	117,363
Algeria	41,932	21,123
Angola	65,657	74,325
Congo	5,960	10,747
Egypt	19,884	9,560
Gabon	12,655	5,664
Libya	--	--
Nigeria	193,004	222,094
Tunisia	--	--
Zaire	8,128	11,470
Total Africa	363,829	370,000
United Arab Emirates	20,602	8,270
Iran	35,952	25
Iraq	29,842	125,515
Israel	--	--
Kuwait	25,630	29,381
Oman	12,831	2,439
Qatar	--	--
Saudi Arabia	234,213	330,194
Total Middle East	359,628	512,685
Australia	17,592	21,669
Indonesia	95,775	68,127
Malaysia	4,464	6,868
Total Far East	148,299	131,380
U.S.S.R.	--	--
Total Eastern Hemisphere	1,006,621	1,131,428
ANNUAL TOTAL	1,705,922	1,869,005

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

U.S. IMPORTS OF CRUDE OIL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year	P.A.D.D. I	P.A.D.D. II	P.A.D.D. III	P.A.D.D. IV	P.A.D.D. V	Imported Crude Oil
1952(1)	192,349	1,116	4,423	--	11,703	209,591
1953	202,611	2,562	2,871	--	28,411	236,455
1954	213,413	2,772	4,553	--	18,741	239,479
1955	232,850	7,425	11,098	--	34,048	285,421
1956	244,453	19,904	11,917	70	65,489	341,833
1957	247,395	22,296	8,726	86	94,749	373,255
1958	238,769	25,328	16,242	13	67,655	348,007
1959	235,259	21,279	10,184	15	85,607	352,344
1960	244,196	23,265	2,939	20	101,155	371,575
1961	236,905	30,971	2,354	30	111,288	381,548
1962	244,235	34,646	2,489	682	128,987	411,039
1963	248,199	34,666	1,698	3,528	124,569	412,660
1964	252,527	37,801	1,835	4,409	142,071	438,643
1965	258,361	41,264	--	4,807	147,608	452,040
1966	259,499	48,114	449	4,954	134,104	447,120
1967	216,920	56,408	672	6,648	131,001	411,649
1968	263,866	78,365	741	10,058	119,393	472,323
1969	269,007	88,434	--	12,714	143,959	514,114
1970	211,403	115,613	--	17,573	138,704	483,293
1971	252,088	137,064	20,449	16,869	186,947	613,417
1972	354,549	171,338	28,331	14,126	242,791	811,135
1973	466,074	260,368	145,654	16,132	295,768	1,183,996
1974	428,608	250,771	289,999	16,579	283,198	1,269,155
1975	451,549	282,658	437,049	16,090	310,835	1,498,181
1976	517,840	366,107	651,381	19,878	379,806	1,935,012
1977(2)	553,955	516,775	927,596	15,957	400,044	2,414,327
1978(2)	542,856	494,132	1,045,691	18,132	219,015	2,319,826
1979(2)	522,580	556,861	1,083,749	23,656	192,695	2,379,541
1980(2)	491,292	409,533	854,233	14,268	156,836	1,926,162
1981(2)	407,384	248,393	828,287	10,513	110,126	1,604,703
1982(2)	349,583	211,727	628,591	14,625	68,687	1,273,214
1983(2)	298,070	193,427	632,974	13,959	76,794	1,215,225
1984(2)	345,642	182,565	639,238	12,233	74,271	1,253,949

(1) Figures not available by P.A.D.D. prior to 1952.
(2) Figures include crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Bureau of Mines, 1952-1972 Minerals Yearbook
U.S. Energy Information Administration 1973-1980 Annual Petroleum Statements
U.S. Energy Information Administration 1981-1984 -- Petroleum Supply Annuals

Section IX
Table 5a

U.S. IMPORTS OF CRUDE OIL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year	P.A.D.D. I	P.A.D.D. II	P.A.D.D. III	P.A.D.D. IV	P.A.D.D. V	Total Imported Crude Oil
1985(2)	356,697	215,179	517,861	14,056	64,505	1,168,297
1986(2)	394,490	286,276	756,465	19,613	68,134	1,524,978
1987(2)	405,596	317,384	887,454	23,563	71,925	1,705,922
1988(2)	429,968	346,950	994,989	23,456	73,642	1,869,005

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(2) Figures include crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 6

U.S. IMPORTS OF RESIDUAL AND DISTILLATE FUEL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year	P.A.D.D. I		P.A.D.D. II		P.A.D.D. III		P.A.D.D. IV		P.A.D.D. V		Totals	
	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil	Residual Fuel Oil	Distillate Fuel Oil
1950	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	120,036	2,602
1951	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	119,166	1,767
1952	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	128,479	2,742
1953	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	131,533	3,379
1954	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	129,124	3,195
1955	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	152,035	4,413
1956	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	162,869	5,159
1957	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	173,229	8,566
1958	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	182,306	14,892
1959(2)	219,341	17,283	230	13	2,981	360	1	2	18	0	222,571	17,658
1960	211,788	11,365	59	12	14,416	1,298	0	96	6,945	0	233,208	12,771
1961	214,453	15,533	284	24	12,320	1,654	1	142	16,210	24	243,268	17,377
1962	237,565	9,811	610	31	11,775	1,892	47	92	14,317	5	264,314	11,831
1963	252,785	7,787	800	63	12,327	1,250	26	1	6,815	9	272,753	9,110
1964	274,306	10,559	804	64	11,204	1,119	45	0	9,412	43	295,771	11,785
1965	318,634	11,041	1,188	17	14,598	1,811	43	0	10,724	133	345,187	13,002
1966	357,907	12,548	860	107	11,708	967	55	0	6,265	223	376,795	13,845
1967	383,260	16,851	587	224	7,475	891	60	0	4,557	526	395,939	18,492
1968	394,528	45,502	573	360	8,271	1,290	54	0	6,502	996	409,928	48,148
1969	440,983	47,720	627	1,264	12,167	937	78	0	7,756	962	461,611	50,883
1970	536,968	49,333	4,207	2,223	11,029	1,192	52	0	5,589	1,078	557,845	53,826
1971	558,771	53,373	3,953	258	6,553	1,079	41	0	8,382	1,073	577,700	55,783
1972	616,990	64,302	5,458	473	6,212	1,191	0	0	8,741	483	637,401	66,449
1973	639,611	125,210	6,068	1,353	10,471	12,406	0	104	20,075	4,076	676,225	143,149
1974	538,573	95,018	7,919	621	11,806	6,766	--	32	20,859	3,142	579,157	105,579

(1) Figures not available by P.A.D. prior to 1959.
(2) Beginning in 1959, figures include receipts from Puerto Rico and Virgin Islands.

Source: U.S. Bureau of Mines. 1950-1972, Minerals Yearbook
1973-1974, Crude Petroleum, Petroleum Products, and Natural Gas Liquids; Annual and December issues

Section IX
Table 6a

U.S. IMPORTS OF RESIDUAL AND DISTILLATE FUEL BY P.A.D. DISTRICTS
(Thousands of Barrels)

Year(2)	P.A.D.D. I Residual Fuel Oil	P.A.D.D. I Distillate Fuel Oil	P.A.D.D. II Residual Fuel Oil	P.A.D.D. II Distillate Fuel Oil	P.A.D.D. III Residual Fuel Oil	P.A.D.D. III Distillate Fuel Oil	P.A.D.D. IV Residual Fuel Oil	P.A.D.D. IV Distillate Fuel Oil	P.A.D.D. V Residual Fuel Oil	P.A.D.D. V Distillate Fuel Oil	Totals Residual Fuel Oil	Totals Distillate Fuel Oil
1975	416,105	54,300	14,015	223	3,957	1,441	--	1	12,451	713	446,528	56,678
1976	495,980	49,225	11,720	97	1,728	680	--	--	7,897	3,518	517,325	53,520
1977	467,124	88,171	11,754	55	818	413	--	--	16,369	2,673	496,065	91,318
1978	468,937	59,023	17,101	306	939	210	--	--	7,663	3,749	494,640	63,288
1979	392,861	64,091	14,267	70	2,044	1,568	--	4	10,972	4,756	420,144	70,489
1980	317,157	48,518	10,754	--	6,485	1,268	--	--	9,161	2,122	343,557	51,908
1981	260,156	59,180	8,592	5	14,055	2,634	--	2	9,266	1,251	292,070	63,070
1982	235,912	29,763	3,966	392	35,700	1,526	9	4	7,514	2,355	283,101	34,040
1983	222,276	56,129	5,375	3,075	19,555	2,189	193	488	7,814	1,660	255,213	63,542
1984	218,730	91,885	2,069	2,999	23,488	1,029	158	1,300	4,766	2,227	249,211	99,439
1985	163,779	64,576	907	2,652	16,579	855	131	1,363	4,888	3,643	186,284	73,089
1986	221,943	82,414	1,394	2,857	13,372	864	50	966	7,394	3,195	244,153	90,296
1987	192,337	84,822	1,316	3,394	9,702	2,855	10	804	2,773	1,301	206,138	93,176
1988	212,374	104,576	1,873	2,090	8,554	913	7	1,352	13,052	1,423	235,860	110,354

(2) Figures include receipts from Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1988 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

U.S. IMPORTS OF UNFINISHED OILS AND REFINED PRODUCTS BY P.A.D. DISTRICTS(2)
(Thousands of Barrels)

	P.A.D.D. I		P.A.D.D. II		P.A.D.D. III		P.A.D.D. IV		P.A.D.D. V		Totals	
Year	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products	Unfinished Oils	Refined Products
1959(1)	16,628	264,347	587	606	2,148	4,861	--	31	3,709	4,322	23,072	274,167
1960	9,534	248,388	520	1,019	994	16,788	--	121	5,430	9,742	15,478	276,058
1961	18,045	256,484	1,184	1,324	145	15,258	--	180	5,974	19,524	25,348	292,770
1962	22,297	279,475	360	1,746	1,616	15,101	--	154	8,243	19,672	32,516	316,238
1963	21,779	299,530	476	2,193	2,102	14,952	--	39	7,345	13,637	31,702	330,351
1964	21,151	321,994	478	3,552	1,011	13,117	--	159	9,947	16,684	32,587	355,506
1965	23,260	369,760	213	5,739	377	18,073	--	727	9,856	20,727	33,706	415,026
1966	26,743	410,435	43	7,276	15	13,826	--	971	8,435	24,298	35,236	456,806
1967	23,222	434,265	20	7,171	276	9,873	--	879	11,707	26,929	35,225	479,117
1968	21,987	489,628	1	7,573	109	10,618	--	2,253	7,253	27,624	29,350	537,696
1969	28,975	543,947	51	8,245	1,034	15,087	--	2,979	8,706	32,413	38,766	602,671
1970	30,221	651,123(3)	--	20,022(3)	913	21,191	--	3,192(3)	8,127	29,980(3)	39,261	725,508(3)
1971	30,651	685,309(3)	--	22,918(3)	2,217	17,425	--	7,786(3)	12,325	43,832(3)	45,193	777,270(3)
1972	30,715	761,491(3)	--	39,798(3)	1,548	16,474	--	16,623(3)	13,442	44,088(3)	45,705	878,474(3)
1973	26,216	874,707(3)	739	53,985(3)	10,681	45,714	--	16,285(3)	12,525	58,645(3)	50,161	1,049,336
1974	14,084	757,416(3)	1,155	49,860(3)	19,208	43,356(3)	--	14,143(3)	9,781	52,789(3)	44,228	917,564(3)
1975	6,038	578,739(3)	392	49,345(3)	4,170	15,989(3)	--	12,327(3)	2,385	42,769(3)	12,985	699,169(3)
1976	7,721	619,068	16	34,334	3,750	13,382	--	5,888(3)	248	32,584	11,735	705,256
1977	9,333	665,984	15	43,912	905	17,422	--	5,922	986	40,659	11,239	773,899
1978	9,022	614,132	15	45,676	226	8,427	--	4,635	650	43,998	9,913	716,868
1979	7,945	545,758	338	68,663	7,687	21,135	--	4,737	5,402	40,532	21,372	680,825
1980	11,489	446,336	217	68,505	5,855	25,986	--	5,222	2,454	32,696	20,015	578,745
1981	18,096	392,310	396	69,554	19,442	39,355	--	7,877	2,858	33,827	40,792	542,923
1982	23,182	355,073	2,708	65,611	35,027	63,820	--	7,141	2,741	37,842	63,657	529,487
1983	32,030	390,381	4,120	62,081	47,060	50,025	604	6,981	1,765	33,471	85,580	542,938
1984	19,936	472,223	3,821	61,098	55,977	73,631	--	8,856	4,762	35,683	84,496	651,490
1985	23,527	399,657	2,985	54,284	88,611	60,507	--	9,190	856	41,593	115,979	565,231
1986	31,039	470,274	0	39,589	58,100	92,858	--	7,666	2,130	44,948	91,269	655,335
1987	41,514	473,083	207	38,783	65,943	75,854	--	6,801	1,634	29,618	109,298	622,139
1988	44,892	526,006	1,105	45,721	82,730	93,474	--	6,805	2,872	36,530	131,599	708,536

(1) Figures not available by P.A.D. district prior to 1959.
(2) Figures include receipts from Puerto Rico and Virgin Islands.
(3) Includes plant condensate.

Source: U.S. Department of Interior, 1959-1972, Minerals Yearbook
Department of Energy, 1973-1980, Annual Petroleum Statements.
1981-1988, Petroleum Supply Annual.

Section IX
Table 8

TOTAL U.S. PETROLEUM IMPORTS BY SOURCE
(Thousands of Barrels Per Day)

	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
WESTERN HEMISPHERE													
Bahamas	--	--	--	--	--	--	--	--	--	--	--	1	--
Canada	158	87	98	122	204	250	265	303	322	384	450	507	608
Colombia	23	26	36	40	28	25	25	30	51	50	48	52	69
Ecuador	--	--	--	--	--	--	--	--	--	--	--	--	--
Mexico	38	32	35	17	39	49	48	46	48	45	49	45	41
Neth. Antilles	273	338	324	300	264	297	312	333	361	332	361	392	450
Puerto Rico	5	27	38	36	43	41	44	47	47	60	59	66	72
Trinidad	9	35	33	50	105	82	112	115	132	153	166	189	215
Venezuela	754	711	784	832	800	907	899	931	995	1,021	935	888	876
Virgin Islands	--	--	--	--	--	--	--	--	--	--	36	78	116
Other	5	11	8	2	10	9	21	10	11	21	41	46	34
Total	1,265	1,267	1,356	1,399	1,493	1,660	1,726	1,815	1,967	2,066	2,145	2,264	2,481
EASTERN HEMISPHERE													
Abu Dhabi/United Arab Emirates(1)	--	--	--	--	--	--	--	3	14	13	5	16	14
Algeria	--	--	--	--	--	--	--	--	--	--	--	--	--
Indonesia	65	58	55	73	62	67	59	63	61	50	62	73	89
Italy	--	8	4	1	--	--	--	1	2	18	28	49	75
Iran	18	15	25	36	60	49	62	66	79	89	71	68	46
Iraq	--	--	--	--	--	--	--	--	--	--	--	--	--
Kuwait	141	197	189	146	130	120	89	69	60	31	23	48	39
Libya	--	--	--	--	--	19	19	39	41	69	42	114	135
Malaysia	--	--	--	--	--	--	--	--	--	--	--	--	--
Netherlands	--	--	--	--	--	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--	15	11	5	8	49
Norway	--	--	--	--	--	--	--	--	--	--	--	--	--
Oman	--	--	--	--	--	--	--	--	--	--	--	--	--
Qatar	--	--	--	--	--	--	--	--	--	--	--	--	--
Saudi Arabia	60	74	68	79	69	73	86	109	144	135	86	60	42
United Kingdom	--	--	--	--	--	--	--	--	--	--	--	--	--
Other	25	81	83	81	103	94	82	93	85	91	70	140	196
Total	309	433	424	416	424	422	397	443	501	507	392	576	685
TOTAL U.S. IMPORTS	1,574	1,700	1,780	1,815	1,917	2,082	2,123	2,258	2,468	2,573	2,537	2,840	3,166

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(1) Figures from 1957 to 1971 reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai, and Sharjah which formed the United Arab Emirates.

Source: U.S. Bureau of Mines

TOTAL U.S. PETROLEUM IMPORTS BY SOURCE
(Thousands of Barrels Per Day)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
WESTERN HEMISPHERE													
Bahamas	32	150	174	174	164	152	116	167	160	147	76	74	65
Canada	767	857	1,108	1,325	1,070	846	599	516	467	538	455	447	482
Colombia	45	27	16	9	5	9	21	17	20	18	4	--	--
Ecuador	--	--	--	48	42	57	51	55	54	42	27	48	42
Mexico	42	27	21	16	8	71	87	179	318	439	533	522	685
Neth. Antilles	442	429	424	585	511	332	275	214	229	231	225	197	175
Puerto Rico	87	95	102	99	90	90	88	105	94	92	88	62	50
Trinidad	217	182	226	255	251	242	273	286	253	190	176	133	112
Venezuela	983	1,019	960	1,135	979	702	699	687	646	690	481	406	412
Virgin Islands	189	273	303	329	391	406	422	466	428	431	388	327	316
Other	52	18	61	28	21	44	44	16	33	50	59	79	84
Total	2,856	3,077	3,395	4,033	3,532	2,951	2,675	2,708	2,701	2,868	2,512	2,216	2,423
EASTERN HEMISPHERE													
AbuDhabi/United Arab Emirates(1)	63	80	73	71	74	117	254	333	385	281	172	81	92
Algeria	8	15	92	135	190	282	432	552	649	636	488	311	170
Indonesia	70	111	164	213	300	389	539	533	573	420	348	366	248
Italy	83	79	83	125	74	27	37	51	38	30	4	--	--
Iran	38	112	142	223	469	280	298	530	555	304	9	--	35
Iraq	--	11	4	4	--	3	26	76	62	88	28	--	3
Kuwait	36	36	45	47	5	16	5	48	6	8	27	--	5
Libya	47	57	123	164	4	232	453	715	654	658	554	319	26
Malaysia	N.A.	N.A.	1	12	12	8	18	63	42	66	70	36	20
Netherlands	N.A.	N.A.	12	53	43	18	8	31	5	23	2	30	35
Nigeria	50	103	251	459	713	762	1,025	1,135	919	1,080	857	620	514
Norway	N.A.	N.A.	2	1	1	17	36	50	104	75	144	119	102
Oman	N.A.	N.A.	N.A.	N.A.	1	2	30	79	68	44	25	24	22
Qatar	--	--	3	7	17	18	24	67	64	31	22	7	7
Saudi Arabia	42	127	190	486	461	715	1,230	1,377	1,144	1,356	1,261	1,129	552
United Kingdom	N.A.	N.A.	10	9	8	11	31	124	180	202	176	375	456
Other	134	143	152	244	207	208	174	272	324	286	209	363	403
Total	563	848	1,347	2,253	2,579	3,105	4,620	6,036	5,662	5,588	4,396	3,780	2,690
TOTAL U.S IMPORTS	3,419	3,925	4,742	6,256	6,111	6,056	7,295	8,744	8,363	8,456	6,908	5,996	5,113

N.A. Not available on individual country basis, included in "Other."

(1) Figures from 1957 to 1971 reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai, and SHARJAH which formed the United Arab Emirates.

Source: U.S. Energy Information Administration, "Supply, Demand, and Stocks by P.A.D. Districts", Annual Reports.
U.S. Energy Information Administration, 1981-1982 -- Petroleum Supply Annual.

Section IX
Table 8b

TOTAL U.S. PETROLEUM IMPORTS BY SOURCE
(Thousands of Barrels Per Day)

	1983	1984	1985	1986	1987	1988
WESTERN HEMISPHERE						
Bahamas	125	88	40	37	37	32
Canada	547	630	770	807	848	999
Colombia	--	--	--	87	148	134
Ecuador	61	55	67	77	29	47
Mexico	826	748	816	699	655	747
Neth. Antilles	189	188	40	25	29	36
Puerto Rico	40	42	28	21	21	22
Trinidad	96	94	113	125	106	97
Venezuela	422	548	605	793	804	794
Virgin Islands	282	294	247	244	272	242
Other	114	110	143	152	127	149
Total	2,702	2,797	2,869	3,067	3,076	3,299
EASTERN HEMISPHERE						
Abu Dhabi/United Arab Emirates	30	117	45	44	61	29
Algeria	240	323	187	271	295	300
Indonesia	338	343	314	318	285	205
Italy	--	--	--	76	54	65
Iran	48	10	27	19	98	--
Iraq	10	12	46	81	83	345
Kuwait	14	36	21	68	84	92
Libya	--	1	4	--	--	--
Malaysia	4	1	3	12	13	19
Netherlands	65	65	58	54	60	61
Nigeria	302	216	293	440	535	618
Norway	66	114	32	60	80	67
Oman	34	14	5	9	36	10
Qatar	--	5	--	13	--	--
Saudi Arabia	337	325	168	685	751	1,073
United Kingdom	382	402	310	350	352	315
Other	479	656	685	657	815	904
Total	2,349	2,640	2,198	3,157	3,602	4,103
TOTAL U.S. IMPORTS	5,051	5,437	5,067	6,224	6,678	7,402

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section IX
Table 9

U.S. DIRECT PETROLEUM IMPORTS FROM MEMBERS OF THE ORGANIZATION OF ARAB PETROLEUM EXPORTING COUNTRIES
SEPTEMBER 1973 - APRIL 1974
(Thousands of Barrels)

OAPEC MEMBERS	SEPTEMBER 1973 Crude	SEPTEMBER 1973 Products	SEPTEMBER 1973 Total	OCTOBER 1973 Crude	OCTOBER 1973 Products	OCTOBER 1973 Total	NOVEMBER 1973 Crude	NOVEMBER 1973 Products	NOVEMBER 1973 Total	DECEMBER 1973 Crude	DECEMBER 1973 Products	DECEMBER 1973 Total
1. Algeria	3,715	924	4,639	3,690	877	4,567	891	974	1,865	28	312	340
2. Bahrain	--	38	38	--	589	589	--	552	552	--	99	99
3. Egypt	--	--	--	--	--	--	--	--	--	--	--	--
4. Iraq	515	--	515	364	--	364	--	--	--	--	--	--
5. Kuwait	1,334	--	1,334	1,724	--	1,724	--	--	--	--	--	--
6. Libya	4,603	1,212	5,815	5,095	1,213	6,308	3,748	407	4,155	579	174	753
7. Qatar	1,222	--	1,222	543	--	543	273	--	273	74	--	74
8. Saudi Arabia	17,967	652	18,619	23,075	1,371	24,446	18,493	705	19,198	5,663	196	5,859
9. Syria	--	--	--	--	--	--	--	--	--	--	--	--
10. United Arab Emirates	2,652	--	2,652	1,920	3	1,923	3,197	--	3,197	--	1	1
OAPEC TOTAL	32,008	2,826	34,834	36,411	4,053	40,464	26,602	2,638	29,240	6,344	782	7,126
U.S. TOTAL	104,117	88,227	192,344	115,905	89,706	205,611	103,570	104,100	207,670	89,633	98,096	187,729
OAPEC AS A % OF U.S. TOTAL	30.7%	3.2%	18.1%	31.4%	4.5%	19.7%	25.7%	2.5%	14.1%	7.1%	0.8%	3.8%

OAPEC MEMBERS	JANUARY 1974 Crude	JANUARY 1974 Products	JANUARY 1974 Total	FEBRUARY 1974 Crude	FEBRUARY 1974 Products	FEBRUARY 1974 Total	MARCH 1974 Crude	MARCH 1974 Products	MARCH 1974 Total	APRIL 1974 Crude	APRIL 1974 Products	APRIL 1974 Total
1. Algeria	--	--	--	75	--	75	244	--	244	3,448	141	3,589
2. Bahrain	--	--	--	--	3	3	--	--	--	--	--	--
3. Egypt	--	--	--	--	--	--	--	--	--	543	--	543
4. Iraq	--	--	--	--	--	--	--	--	--	--	--	--
5. Kuwait	--	--	--	--	--	--	--	--	--	62	--	62
6. Libya	29	--	29	468	--	468	142	--	142	244	--	244
7. Qatar	--	--	--	--	--	--	--	--	--	--	--	--
8. Saudi Arabia	593	66	659	1,073	30	1,103	2,364	289	2,653	1,234	736	1,970
9. Syria	--	--	--	--	--	--	--	--	--	--	--	--
10. United Arab Emirates	304	--	304	--	--	--	--	--	--	405	--	405
OAPEC TOTAL	926	66	992	1,616	33	1,649	2,750	289	3,039	5,936	877	6,813
U.S. TOTAL	73,839	92,158	165,997	62,940	83,246	146,186	76,329	85,328	161,657	98,011	81,094	179,105
OAPEC AS A % OF U.S. TOTAL	1.3%	0.1%	0.6%	2.6%	*	1.1%	3.6%	0.3%	1.9%	6.1%	1.1%	3.8%

* Less than one-tenth of one percent
(1) Less than 1/2 unit

Source: U.S. Bureau of Mines and U.S. Bureau of Census

Section IX
Table 10

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1972

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	70	65	--	10	40	5	5	--	225
Canada	1,085	--	--	--	--	--	--	--	--	--	1,085
Caribbean	2,270	520	160	545	5	10	10	--	--	100	3,620
Other Western Hemisphere	45	--	25	--	--	--	30	--	--	--	1,000
Western Europe	160	15	--	--	40	--	--	--	20	90	325
Middle East	475	250	1,115	8,570	460	1,265	3,770	260	605	180	16,950
North Africa	230	30	250	2,730	10	--	5	--	220	--	3,475
West Africa	265	70	290	1,170	--	--	70	--	30	20	1,915
South East Asia	180	--	10	5	10	--	830	55	--	--	1,090
USSR, Eastern Europe	20	--	130	970	75	--	25	--	40	--	1,260
Other Eastern Hemisphere	10	--	--	5	--	30	5	--	--	--	50
TOTAL IMPORTS	4,740	915	2,050	14,060	600	1,315	4,785	320	920	390	30,095

1973

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	55	85	5	25	30	--	--	--	230
Canada	1,335	--	--	--	--	--	--	--	--	--	1,335
Caribbean	2,540	500	130	355	5	5	10	--	--	85	3,630
Other Western Hemisphere	80	--	100	--	--	--	--	--	--	20	200
Western Europe	265	--	--	--	60	--	--	--	10	70	405
Middle East	820	320	1,000	10,350	535	1,315	4,385	290	775	180	19,970
North Africa	360	40	175	2,545	5	--	20	--	265	10	3,420
West Africa	515	90	415	1,030	--	--	110	--	5	--	2,165
South East Asia	240	--	--	10	--	--	1,115	40	--	--	1,405
USSR, Eastern Europe	35	--	145	935	75	5	55	--	20	15	1,285
Other Eastern Hemisphere	15	--	--	--	--	25	35	--	5	5	85
TOTAL IMPORTS	6,205	980	2,020	15,310	685	1,375	5,760	330	1,080	385	34,130

*Includes quantities in transit, transit losses, minor movements not otherwise shown, military uses, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10a

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1974

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	30	60	75	5	5	35	10	--	--	220
Canada	1,025	--	--	20	--	--	--	--	--	--	1,045
Caribbean	2,320	430	155	320	10	--	10	--	--	--	3,245
Other Western Hemisphere	125	--	120	--	--	--	--	--	--	--	245
Western Europe	240	--	--	--	80	--	15	--	35	95	465
Middle East	1,025	400	1,265	10,195	490	1,320	4,050	285	715	305	20,050
North Africa	230	15	130	1,915	10	--	70	--	255	--	2,625
West Africa	795	15	305	1,300	--	30	100	--	--	--	2,545
South East Asia	315	--	45	5	--	--	990	45	--	--	1,400
USSR, E. Europe & China	30	--	160	1,010	60	--	120	--	20	--	1,400
Other Eastern Hemisphere	20	--	--	--	--	30	40	--	--	--	90
TOTAL IMPORTS	6,125	890	2,240	14,840	655	1,385	5,430	340	1,025	400	33,330

1975

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Total Exports
United States	--	20	65	70	5	--	30	10	10	210
Canada	800	--	--	--	--	--	--	--	--	800
Latin America	2,270	270	120	380	40	--	20	--	75	3,175
Western Europe	45	--	--	--	165	--	--	--	35	245
Middle East	1,140	540	1,525	8,815	475	1,450	3,675	255	630	18,505
North Africa	500	--	140	1,530	--	--	70	--	165	2,405
West Africa	850	20	200	835	--	--	70	--	--	1,975
East and South Africa	--	--	--	--	--	35	--	--	--	35
South Asia	--	--	--	5	--	--	--	--	--	5
South East Asia	400	--	80	--	10	--	885	80	--	1,455
Japan	--	--	--	5	--	--	--	--	--	5
Australasia	5	--	--	--	--	10	35	--	--	5
USSR, E. Europe & China	15	--	210	970	15	70	160	--	30	1,470
TOTAL IMPORTS	6,025	850	2,340	12,610	710	1,565	4,945	345	945	30,335

*Includes quantities in transit, transit losses, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1976

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	10	70	80	10	5	30	5	10	--	220
Canada	595	--	--	5	--	--	--	--	--	--	600
Latin America	2,010	320	140	335	10	--	10	5	30	450	3,310
Western Europe	160	--	--	--	100	--	--	--	85	--	345
Middle East	1,910	385	1,725	9,405	490	1,630	3,955	255	710	390	20,855
North Africa	915	20	160	1,680	15	10	45	--	225	--	3,070
West Africa	1,085	30	230	860	--	--	25	--	--	--	2,230
East and South Africa	--	--	--	--	--	30	--	--	--	--	30
South East Asia	585	--	15	5	--	--	1,080	80	--	--	1,765
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	10	--	--	--	--	5	40	--	--	--	55
USSR, E. Europe & China	20	--	160	1,355	20	100	135	--	25	--	1,815
TOTAL IMPORTS	7,290	765	2,500	13,725	645	1,785	5,320	345	1,085	840	34,300

1977

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	25	105	75	5	--	30	5	5	--	250
Canada	540	--	--	--	--	--	--	--	--	--	540
Latin America	2,205	290	110	290	45	--	10	--	65	100	3,115
Western Europe	250	--	10	--	130	5	--	5	80	--	480
Middle East	2,560	395	1,570	8,855	485	1,600	4,095	240	805	125	20,730
North Africa	1,320	--	150	1,735	5	--	25	--	60	--	3,295
West Africa	1,220	--	275	845	--	--	--	--	30	--	2,370
East and South Africa	--	--	--	--	--	20	--	--	--	--	20
South Asia	--	--	--	--	--	--	--	--	--	--	--
South East Asia	590	--	--	20	5	--	1,155	90	5	50	1,915
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	10	--	--	--	--	5	45	--	--	--	60
USSR, E. Europe & China	15	--	180	1,475	5	120	150	--	30	--	1,975
TOTAL IMPORTS	8,710	710	2,400	13,295	680	1,755	5,510	340	1,080	275	34,755

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1978

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	90	90	85	10	5	30	5	50	--	365
Canada	445	--	--	--	--	--	--	--	--	--	445
Latin America	2,225	290	360	345	25	--	15	--	40	100	3,400
Western Europe	375	--	--	--	135	--	--	--	40	--	550
Middle East	2,300	275	1,525	8,685	425	1,610	4,010	250	515	135	19,730
North Africa	1,310	--	200	1,770	15	--	10	--	65	--	3,370
West Africa	975	--	300	780	60	--	--	--	--	--	2,115
East and South Africa	--	--	--	5	--	5	--	--	--	--	10
South Asia	--	--	--	5	--	--	--	--	--	--	5
South East Asia	570	--	--	20	15	--	1,085	100	--	--	1,790
Japan	5	--	--	--	--	10	--	--	--	--	15
Australasia	10	--	--	--	--	10	35	--	--	--	55
USSR, E. Europe & China	10	--	200	1,395	25	200	150	--	30	--	2,010
TOTAL IMPORTS	8,225	655	2,675	13,099	710	1,840	5,335	355	740	235	33,860

1979

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	100	225	105	--	15	35	5	--	--	485
Canada	455	--	--	--	--	--	--	--	--	--	455
Latin America	2,410	230	210	270	25	--	10	--	135	355	3,645
Western Europe	350	--	--	--	145	--	--	--	25	--	520
Middle East	2,115	260	1,535	8,685	440	1,745	4,155	285	910	305	20,435
North Africa	1,355	20	120	1,870	20	--	15	--	25	--	3,425
West Africa	1,185	--	390	1,010	60	--	--	--	--	--	2,645
East and South Africa	--	--	--	--	--	10	--	--	--	--	10
South Asia	--	--	--	--	--	10	10	--	20	--	40
South East Asia	530	--	25	25	10	--	1,215	90	20	--	1,915
Japan	--	--	--	--	--	10	--	--	--	--	10
Australasia	10	--	--	--	--	--	15	--	--	--	25
USSR, E. Europe & China	--	--	200	1,115	35	180	150	--	60	--	1,740
TOTAL IMPORTS	8,410	610	2,705	13,080	735	1,970	5,605	380	1,195	660	35,350

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

Section IX
Table 10d

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1980

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	105	290	145	5	10	--	--	--	--	555
Canada	370	--	--	30	--	10	10	--	--	25	445
Latin America	2,050	215	275	625	50	--	80	5	235	350	3,885
Western Europe	355	5	--	--	85	5	--	--	10	--	460
Middle East	1,555	300	1,615	7,275	445	1,745	3,560	220	695	100	17,510
North Africa	1,015	5	135	1,440	15	--	55	--	155	--	2,820
West Africa	985	5	420	990	60	--	15	--	--	--	2,475
East and South Africa	--	--	--	--	--	10	--	--	--	--	10
South Asia	--	--	--	--	--	--	5	--	35	--	40
South East Asia	405	--	--	15	25	--	1,075	140	45	--	1,705
Japan	--	--	--	--	--	5	--	--	--	--	5
Australasia	--	--	--	5	--	10	5	--	--	--	20
USSR, E. Europe & China	--	--	205	1,300	--	225	180	--	95	--	2,005
TOTAL IMPORTS	6,735	635	2,940	11,825	685	2,020	4,985	365	1,270	475	31,935

1981

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	95	260	135	5	40	40	10	10	10	605
Canada	425	--	5	15	5	--	--	--	--	5	455
Latin America	1,950	295	220	880	105	--	155	25	380	370	4,380
Western Europe	525	5	--	--	105	10	5	--	110	--	760
Middle East	1,255	195	1,395	5,750	385	1,755	3,020	180	555	115	14,605
North Africa	655	30	70	1,350	--	--	70	--	--	--	2,175
West Africa	720	5	285	660	40	--	20	--	--	--	1,730
East and South Africa	--	--	--	--	10	5	5	--	--	--	20
South Asia	--	--	--	--	--	5	5	5	30	--	45
South East Asia	395	--	--	50	20	--	950	95	150	--	1,660
Japan	--	--	--	--	--	5	--	5	--	--	10
Australasia	5	--	--	--	--	10	--	--	--	--	15
USSR, E. Europe & China	20	--	185	1,405	--	240	190	--	155	--	2,195
TOTAL IMPORTS	5,950	625	2,420	10,245	675	2,070	4,460	320	1,390	500	28,655

*Includes quantities in transit, minor movements not otherwise shown, military use, etc.

SOURCE: BP Statistical Review of World Energy

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1982

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	90	315	225	10	65	75	10	10	15	815
Canada	470	--	--	10	--	--	5	--	--	--	485
Latin America	2,050	180	415	750	100	10	150	--	150	330	4,135
Western Europe	580	25	30	--	155	10	--	5	160	--	965
Middle East	770	95	920	4,625	275	1,640	2,755	155	425	--	11,660
North Africa	245	15	125	1,500	20	--	45	--	190	5	2,145
West Africa	605	5	105	700	45	--	--	--	40	--	1,500
East and South Africa	--	--	--	--	20	5	--	--	--	--	25
South Asia	--	--	--	45	--	5	5	5	10	--	70
South East Asia	275	--	--	25	20	--	890	135	135	--	1,480
Japan	--	--	--	5	--	5	--	5	--	--	15
Australasia	5	--	--	--	--	--	20	--	--	--	25
USSR, E. Europe & China	40	--	200	1,465	--	240	210	5	85	--	2,245
TOTAL IMPORTS	5,040	410	2,110	9,350	645	1,980	4,155	320	1,205	350	25,565

1983

FROM / TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	80	255	185	15	80	105	15	5	--	740
Canada	540	--	--	--	--	--	5	--	--	--	545
Latin America	2,160	125	425	820	65	5	180	5	160	120	4,065
Western Europe	550	15	25	--	145	5	--	5	105	10	860
Middle East	575	60	855	3,415	405	1,615	2,750	120	545	15	10,355
North Africa	280	25	60	1,675	5	--	40	--	95	--	2,180
West Africa	475	15	115	755	25	--	5	--	35	--	1,425
East and South Africa	--	--	--	--	--	5	--	--	--	--	5
South Asia	--	--	--	5	10	25	15	10	--	--	65
South East Asia	345	--	--	25	20	--	780	85	55	90	1,400
Japan	--	--	--	--	--	10	--	--	--	--	10
Australasia	5	--	--	--	--	10	30	--	5	--	50
USSR, E. Europe & China	60	--	220	1,785	--	240	235	5	110	--	2,655
TOTAL IMPORTS	4,990	320	1,955	8,665	690	1,995	4,145	245	1,115	235	24,355

* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

SOURCE: BP Statistical Review of World Energy

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1984

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Other Eastern Hemisphere	Destination* not known	Total Exports
United States	--	85	255	205	10	60	90	10	5	--	720
Canada	625	--	--	--	--	--	5	--	--	25	655
Latin America	2,255	125	420	875	65	--	185	--	120	55	4,100
Western Europe	620	25	40	--	80	--	--	5	75	15	860
Middle East	615	70	700	3,045	340	1,555	2,830	110	525	55	9,845
North Africa	315	30	80	1,650	35	--	25	--	155	--	2,290
West Africa	445	5	105	965	55	--	--	--	40	55	1,670
East & South Africa	--	--	--	--	5	--	--	--	--	10	15
South Asia	--	--	--	20	5	10	15	--	--	5	55
South East Asia	375	--	--	35	10	--	980	105	65	130	1,600
Japan	--	--	--	--	--	10	--	--	--	5	15
Australasia	40	--	--	--	--	15	10	--	--	--	60
USSR, E. Europe & China	90	00	200	1,800	--	385	270	--	120	--	2,865
TOTAL IMPORTS	5,380	340	1,800	8,595	605	2,035	4,305	230	1,105	355	24,750

1985

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	70	285	165	10	65	105	5	5	60	770
Canada	750	--	--	5	--	--	--	--	--	--	755
Latin America	2,005	120	320	805	55	70	145	--	45	--	3,565
Western Europe	470	70	15	--	65	5	5	--	95	85	805
Middle East	425	50	635	3,020	350	1,390	2,715	65	690	--	9,340
North Africa	205	35	100	1,725	20	--	55	--	275	--	2,415
West Africa	505	10	170	965	80	10	--	--	25	--	1,765
East and South Africa	--	--	--	--	15	--	--	--	--	--	15
South Asia	--	--	--	20	--	5	10	--	--	10	45
South East Asia	410	--	--	50	30	--	815	100	80	75	1,555
Japan	--	--	--	--	--	15	--	--	--	--	15
Australasia	40	--	--	--	--	40	65	--	--	--	145
USSR, E.Europe & China	100	--	295	1,610	5	465	280	--	1,610	50	4,415
TOTAL IMPORTS	4,910	355	1,820	8,365	630	2,065	4,195	170	2,825	280	25,605

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* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source: BP Statistical Review of World Energy

Section IX
Table 10g

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1986

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	85	240	205	5	75	35	10	30	80	765
Canada	670	--	--	5	--	--	--	--	--	--	675
Latin America	2,205	75	160	630	55	80	210	--	70	115	3,600
Western Europe	615	130	25	--	110	--	15	--	90	105	1,090
Middle East	915	95	570	3,520	335	1,430	2,715	100	930	270	10,880
North Africa	275	--	--	1,830	15	--	30	--	365	--	2,515
West Africa	640	45	150	1,060	80	--	--	--	5	--	1,980
East and South Africa	--	--	--	5	--	--	--	--	--	--	5
South Asia	20	--	--	15	--	--	15	10	--	--	60
South East Asia	525	--	--	5	5	--	795	70	110	40	1,550
Japan	--	--	--	--	--	10	--	--	10	--	20
Australasia	30	--	--	--	--	30	45	--	--	--	105
USSR, E.Europe & China	150	--	475	1,585	--	350	280	--	1,570	35	4,445
TOTAL IMPORTS	6,045	430	1,620	8,860	605	1,975	4,140	190	2,180	645	27,690

1987

TO FROM	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	85	95	180	5	70	30	5	10	55	745
Canada	610	--	--	5	--	--	15	--	--	--	630
Latin America	2,170	50	--	245	--	20	190	5	--	355	3,035
Western Europe	585	150	25	--	120	5	--	5	50	115	1,055
Middle East	1,120	35	255	3,375	330	1,555	2,710	110	825	--	10,315
North Africa	340	--	10	1,605	--	35	40	--	405	--	2,435
West Africa	855	25	60	835	60	5	5	--	35	--	1,880
East and South Africa	--	--	--	5	--	--	--	--	--	--	5
South Asia	25	--	--	5	--	5	15	5	--	--	55
South East Asia	330	--	10	5	--	--	825	80	50	55	1,355
Japan	5	--	--	--	--	20	--	--	5	--	30
Australasia	55	--	--	--	--	50	35	--	--	--	140
USSR, E. Europe and China	150	--	345	1,645	30	255	260	--	1,690	105	4,480
TOTAL IMPORTS	6,245	345	1,000	7,905	545	2,020	4,125	220	3,070	685	26,160

** Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source: BP Statistical Review of World Energy.

Section IX
Table 10h

WORLD OIL MOVEMENTS
(Thousands of Barrels per Day)

1988

FROM \ TO	USA	Canada	Latin America	Western Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination* not known	Total Exports
United States	--	86	258	162	4	94	50	19	12	89	694
Canada	682	--	--	9	--	--	4	3	6	--	704
Latin America	2,084	103	--	628	--	34	189	--	--	55	3,093
Western Europe	649	203	11	--	84	14	9	3	84	2	1,059
Middle East	1,601	57	367	3,554	382	2,059	2,797	147	878	--	11,842
North Africa	333	--	--	1,898	--	133	58	--	176	--	2,598
West Africa	894	44	128	826	86	26	6	--	--	12	2,022
East and South Africa	1	--	--	--	--	--	--	1	--	--	2
South Asia	30	--	--	--	--	3	37	3	--	--	73
South East Asia	242	--	8	23	--	12	909	80	33	--	1,307
Japan	1	--	--	--	--	15	--	--	--	1	17
Australasia	53	1	--	--	--	74	35	--	1	--	164
USSR, E.Europe & China	180	--	274	2,004	16	434	318	2	1,849	574	5,651
TOTAL IMPORTS	6,750	494	1,046	9,104	572	2,898	4,412	258	3,039	653	29,226

** Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source: BP Statistical Review of World Energy.

Section IX
Table 11

HISTORICAL U.S. IMPORTS OF CRUDE OIL AND REFINED PRODUCTS: 1918-1946

	Crude Oil		Refined Products	
	Thous. of Bbls	Thous. of B/D	Thous. of Bbls	Thous. of B/D
1918	5,884	16	62,128	170
1919	6,348	17	57,500	158
1920	9,295	25	70,281	192
1921	9,627	26	62,215	170
1922	10,805	30	63,759	175
1923	17,534	48	84,713	232
1924	18,239	50	99,291	271
1925	13,337	37	100,841	276
1926	15,407	42	116,881	320
1927	15,844	43	126,159	346
1928	18,966	52	136,374	373
1929	26,401	72	137,133	376
1930	23,705	65	133,164	365
1931	25,535	70	99,146	272
1932	27,393	75	76,134	208
1933	36,584	100	70,430	193
1934	41,127	113	73,707	202
1935	51,430	141	77,925	213
1936	50,313	137	82,056	224
1937	67,234	184	106,077	291
1938	77,254	212	116,891	320
1939	72,076	197	117,473	322
1940	51,496	141	78,970	216
1941	33,238	91	75,592	207
1942	33,834	93	83,073	228
1943	41,342	113	108,615	298
1944	34,238	94	173,378	474
1945	32,998	90	149,985	411
1946	42,436	116	110,687	303

Source: Department of Interior, Bureau of Mines, Minerals Industry Surveys and "Annual Petroleum Statements".

BASIC PETROLEUM DATA BOOK

SECTION X. EXPORTS

Table 1. Total U.S. Domestic Production and Exports of Petroleum

Table 2. U.S. Exports of Petroleum to Selected Areas

Table 3. African Oil Exports to Selected Areas

Table 4. Middle East Oil Exports to Selected Areas

Table 5. The Role of Middle East and African Oil in Western European and Japanese Consumption

Table 6. The Role of Middle East and African Oil in World Exports

Section X
Table 1

TOTAL U.S. DOMESTIC PRODUCTION AND EXPORTS OF CRUDE OIL AND ITS PRODUCTS
(Thousands of barrels)

Year	Production(1)	Exports	Exports As a % of U.S. Production
1947	1,989,850	164,477	8.3
1948	2,167,264	134,674	6.2
1949	1,999,215	119,376	6.0
1950	2,155,693	111,306	5.2
1951	2,452,465	154,052	6.3
1952	2,513,351	158,188	6.3
1953	2,596,661	146,591	5.6
1954	2,567,121	129,733	5.1
1955	2,765,799	134,188	4.9
1956	2,910,010	157,386	5.4
1957	2,911,891	207,187	7.1
1958	2,743,736	100,638	3.7
1959	2,895,347	77,067	2.7
1960	2,915,090	73,906	2.5
1961	2,983,447	63,563	2.1
1962	3,048,894	61,390	2.0
1963	3,153,609	75,914	2.4
1964	3,209,293	73,879	2.3
1965	3,290,070	68,288	2.1
1966	3,496,398	72,400	2.1
1967	3,730,198	112,060	3.0
1968	3,879,353	84,544	2.2
1969	3,951,992	84,885	2.1
1970	4,123,366	94,458	2.3
1971	4,071,729	81,685	2.0
1972	4,093,584	81,389	2.0
1973	3,995,326	84,413	2.1
1974	3,818,683	80,491	2.1
1975	3,652,737	76,428	2.1
1976	3,563,225	81,599	2.3
1977	3,599,720	88,588	2.5
1978	3,750,302	132,057	3.5
1979	3,699,333	171,856	4.6
1980	3,722,152	199,256	5.4
1981	3,715,743	217,024	5.8
1982	3,722,591	297,514	8.0
1983	3,730,085	269,890	7.2
1984	3,846,173	264,077	6.9

(1) Figures include crude oil, lease condensate and natural gas liquids.

Source: U.S. Energy Information Administration, Annual Petroleum Statements
1981-1984 -- U.S. Energy Information Administration, Petroleum Supply Annuals.

TOTAL U.S. DOMESTIC PRODUCTION AND EXPORTS OF CRUDE OIL AND ITS PRODUCTS
(Thousands of barrels)

Year	Production(1)	Exports	Exports As a % of U.S. Production
1985	3,861,911	285,069	7.4
1986	3,734,252	286,373	7.7
1987	3,629,669	278,731	7.7
1988	3,573,815	298,466	8.4

(p) Preliminary.
(1) Figures include crude oil, lease condensate and natural gas liquids.

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annuals.

Section X
Table 2

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	CANADA		MEXICO		CARIBBEAN(1)		OTHER LATIN AMERICAN		UNITED KINGDOM		OTHER EUROPEAN	
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products
1947	39,058	18,266	101	4,446	1,354	5,854	1,120	3,279	299	28,565	4,424	20,674
1948	33,298	20,629	62	4,157	1,498	8,788	1,417	3,439	471	16,223	2,991	13,150
1949	29,996	15,137	43	5,037	1,763	8,496	295	4,186	424	12,410	547	12,423
1950	30,708	15,953	--	6,229	1,829	7,278	661	4,141	441	5,868	851	8,227
1951	21,172	17,867	--	7,034	2,167	9,729	1,356	3,932	457	13,914	1,048	12,284
1952	20,172	25,211	--	7,130	2,513	13,703	1,789	4,295	499	9,889	976	9,466
1953	14,025	26,939	--	8,281	2,620	10,399	1,081	3,515	418	9,201	926	7,809
1954	8,130	22,635	--	12,003	2,928	7,185	608	5,003	462	7,687	745	5,424
1955	6,501	20,329	--	16,062	3,136	7,713	236	6,426	532	8,875	650	7,385
1956	5,570	20,560	--	16,485	3,262	9,979	--	5,007	5,238	10,831	13,377	14,560
1957	8,240	18,307	902	15,950	3,283	11,120	--	7,110	14,880	19,660	21,003	29,660
1958	1,153	13,497	696	11,568	592	7,977	--	3,661	378	6,010	450	9,420
1959	--	16,061	21	8,297	--	3,978	--	4,753	405	6,592	550	9,515
1960	--	12,622	--	6,428	--	3,315	--	4,131	433	3,840	568	10,395
1961	20	8,381	133	4,415	--	3,721	1	3,143	437	3,268	355	9,401
1962	8	7,706	--	4,981	--	2,888	--	3,417	428	2,616	--	10,290
1963	2	7,985	3	6,889	--	3,481	--	3,036	424	3,443	1	19,933
1964	7	9,791	3	8,920	--	4,503	--	3,656	336	3,191	--	14,387
1965	12	9,619	333	9,452	--	3,322	1	2,635	352	3,924	--	13,365
1966	2	11,715	203	13,955	--	2,179	--	3,240	431	3,784	1	13,522
1967	3,688	14,521	18	12,999	645	3,479	--	4,444	16,959	5,562	4,604	15,318
1968	5	14,126	114	11,140	283	1,603	--	5,138	352	4,838	--	14,912
1969	30	16,017	1	12,098	220	2,511	--	5,829	430	4,421	--	17,005
1970	328	10,855	--	12,142	4,264	3,272	--	4,565	176	4,185	--	20,250
1971	60	9,384	--	15,180	181	4,474	--	5,484	120	3,053	--	19,406
1972	--	9,599	--	15,061	--	3,888	--	4,374	--	3,705	--	24,033
1973	--	11,427	--	15,984	--	3,614	--	4,294	--	3,249	177	24,863
1974	108	11,504	--	12,885	966	3,023	--	4,005	--	2,317	--	24,238

N.A. Not Available
(1) As of 1971, includes exports to Puerto Rico and Virgin Islands.

Source: U.S. Bureau of Mines: 1947-1974, Minerals Yearbook.

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

Year	MIDDLE EAST		JAPAN		OTHER ASIAN		AFRICA		TOTAL
	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	U.S. EXPORTS
1947	N.A.		--	--	--	14,565	--	2,786	164,477
1948	N.A.		--	--	--	8,570	--	2,400	134,674
1949	N.A.		--	364	--	7,176	--	2,922	119,376
1950	N.A.		334	92	--	2,953	--	1,916	111,306
1951	N.A.		2,403	4,878	--	11,406	--	4,783	154,052
1952	N.A.		748	7,286	--	13,126	--	5,896	158,188
1953	N.A.		862	10,508	--	8,740	--	5,043	146,591
1954	N.A.		726	8,166	--	5,996	--	2,734	129,733
1955	N.A.		515	11,282	--	4,363	--	1,636	134,188
1956	N.A.		1,055	9,790	--	4,309	122	2,154	157,386
1957	N.A.		1,057	13,642	339	6,431	539	3,328	207,187
1958	N.A.		1,076	12,486	--	4,491	--	2,368	100,638
1959	N.A.		1,548	16,153	--	5,819	--	2,383	77,067
1960	N.A.		2,086	20,595	-	5,891	--	2,332	73,906
1961	N.A.		2,218	19,255	55	5,930	--	1,686	63,563
1962	N.A.		1,354	18,333	--	6,544	--	2,655	61,390
1963	N.A.		1,266	20,080	1	7,316	--	3,066	75,914
1964	N.A.		952	19,429	63	6,602	--	2,206	73,879
1965	N.A.		306	14,466	--	7,648	--	1,596	68,288
1966	N.A.		808	12,283	31	7,077	1	2,019	72,400
1967	N.A.		626	17,938	--	7,299	1	2,179	112,060
1968	N.A.		1,048	19,566	--	7,779	--	2,026	84,545
1969	N.A.		755	16,314	--	7,364	--	1,849	84,885
1970	N.A.		223	24,868	--	6,433	--	1,475	94,458
1971	--	1,028	139	13,941	1	7,697	2	1,695	81,845
1972	--	1,158	187	11,475	--	6,165	--	1,744	81,389
1973	--	957	520	11,782	--	5,888	--	1,658	84,413
1974	--	1,146	--	13,809	--	4,728	--	1,762	80,491

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(2) Total includes a quantity of refined products exported to an undesignated area whose destination is undisclosed for security reasons: 1950-5,612, 1951-16,384, 1952-18,653, 1953-18,206, 1954-21,941, 1955-20,239, 1956-18,715, 1957-15,221, 1958-12,419.

Source: U.S. Bureau of Mines: 1947-74, Minerals Yearbook

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	CANADA		MEXICO		CARIBBEAN(1)		OTHER LATIN AMERICAN		UNITED KINGDOM		OTHER EUROPEAN	
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products
1975	19	8,139	--	15,425	2,127	3,114	--	3,386	--	2,636	--	24,846
1976	2,241	8,096	--	12,677	700	8,772	--	3,474	--	2,732	--	27,220
1977	16,460	9,548	--	8,893	1,795	3,566	--	3,338	--	3,136	--	25,933
1978	28,761	10,640	--	9,877	28,967	3,373	--	4,459	--	2,447	--	26,457
1979	26,079	10,299	--	7,835	59,628	3,538	--	4,718	--	2,493	--	37,497
1980	30,567	8,822	--	10,085	74,367	9,942	--	4,006	--	2,386	--	34,885
1981	16,440	16,102	--	9,416	65,104	18,692	--	2,781	--	1,971	--	47,710
1982	13,083	18,019	--	19,464	67,633	23,531	--	6,714	--	5,167	--	77,969
1983	6,781	21,047	--	8,812	46,431	21,026	--	6,966	--	3,047	--	66,025
1984	5,784	24,672	--	12,681	49,498	20,570	--	11,046	--	5,291	--	56,913
1985	7,523	19,463	--	22,187	55,019	20,772	--	10,174	--	5,210	--	55,580
1986	6,040	25,027	--	20,525	39,954	20,225	--	11,408	--	3,095	--	70,183
1987	5,988	24,247	--	25,544	47,864	27,966	--	6,943	7	2,359	--	56,432
1988	3,737	26,897	--	25,764	52,024	19,959	--	16,949	--	3.370	--	58,048

(1) Includes exports to Puerto Rico and Virgin Islands

Source: 1975-1980: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1988: U.S. Energy Information Administration, Petroleum Supply Annuals.

Section X
Table 2c

U.S. EXPORTS OF PETROLEUM TO SELECTED AREAS
(Thousands of Barrels)

	MIDDLE EAST		JAPAN		OTHER ASIAN		AFRICA		TOTAL
Year	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	Crude Oil	Refined Products	U.S. EXPORTS
1975	--	995	--	10,012	--	3,550	--	2,179	76,428
1976	--	1,280	--	9,326	--	3,725	--	2,356	81,599
1977	--	1,034	--	8,951	--	4,213	--	1,721	88,588
1978	--	1,380	--	9,642	--	4,802	--	1,252	132,057
1979	--	1,085	--	12,543	--	4,416	--	1,725	171,856
1980	--	1,291	--	11,596	--	9,028	--	2,280	199,256(1)
1981	--	1,912	--	14,014	7	16,715	--	2,595	217,024(1)
1982	--	2,182	--	24,836	--	28,077	--	2,791	297,514(1)
1983	--	1,808	--	38,132	--	35,904	--	3,097	269,854(1)
1984	--	1,750	--	33,657	--	24,263	--	2,724	264,077(1)
1985	--	1,315	--	39,468	--	18,215	--	2,668	285,069(1)
1986	--	2,375	--	39,975	--	30,592	--	2,345	286,373(1)
1987	--	3,107	--	43,799	1,105	29,693	--	1,337	278,732(1)
1988	--	3,712	--	45,435	951	41,786	--	1,533	298,466(1)

(1) Includes exports to Greenland, and other. Includes exports to Puerto Rico and Virgin Islands

Source: 1975-1980: U.S. Energy Information Administration, Annual Petroleum Statements.
1981-1988: U.S. Energy Information Administration, Petroleum Supply Annuals.

AFRICAN OIL EXPORTS TO SELECTED AREAS
(Thousands of barrels per day)

Year(1)	United States	Western Europe	Japan	All Others	African Exports
1960	--	237	--	--	237
1961	5	430	--	--	435
1962	25	740	--	--	765
1963	25	1,125	--	30	1,180
1964	55	1,565	--	30	1,650
1965	70	2,040	--	30	2,140
1966	90	2,540	5	130	2,765
1967	55	2,700	--	155	2,910
1968	170	3,535	5	165	3,875
1969	330	4,370	15	230	4,945
1970	125	5,330	50	300	5,805
1971	195	4,430	60	805	5,490
1972	495	3,900	75	920	5,390
1973	875	3,575	130	1,005	5,585
1974	1,025	3,215	170	760	5,170
1975	1,350	2,365	140	560	4,415
1976	2,000	2,540	70	720	5,330
1977	2,540	2,580	25	540	5,685
1978	2,285	2,555	--	655	5,495
1979	2,540	2,880	15	645	6,080
1980	2,000	2,430	70	805	5,305
1981	1,375	2,010	95	445	3,925
1982	850	2,200	45	575	3,670
1983	755	2,430	45	380	3,610
1984	760	2,615	25	575	3,975
1985	705	2,690	55	745	4,195
1986	915	2,895	30	660	4,500
1987	1,195	2,445	45	635	4,320
1988	1,228	2,724	64	606	4,622

(1) Not available prior to 1960

Source: "BP Statistical Review of World Energy," Annual

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Table 4

MIDDLE EAST OIL EXPORTS TO SELECTED AREAS
(Thousands of barrels per day)

Year(1)	United States	Western Europe	Japan	All Others	Middle East Exports
1959	355	2,528	--	1,060	4,120
1960	347	2,724	--	1,619	4,690
1961	345	2,855	610	1,280	5,090
1962	315	3,060	720	1,490	5,585
1963	295	3,400	920	1,540	6,155
1964	310	3,740	1,115	1,760	6,925
1965	350	4,195	1,435	1,630	7,610
1966	320	4,375	1,650	2,280	8,625
1967	200	4,605	2,035	2,305	9,145
1968	270	5,065	2,650	2,460	10,445
1969	265	5,780	3,055	2,425	11,525
1970	175	6,220	3,485	2,835	12,715
1971	390	7,685	3,810	3,365	15,250
1972	475	8,570	3,770	4,135	16,950
1973	820	10,350	4,385	4,415	19,970
1974	1,025	10,195	4,050	4,780	20,050
1975	1,140	8,815	3,675	4,875	18,505
1976	1,910	9,405	3,955	5,585	20,855
1977	2,560	8,855	4,095	5,220	20,730
1978	2,300	8,685	4,010	4,735	19,730
1979	2,115	8,685	4,155	5,480	20,435
1980	1,555	7,275	3,560	5,120	17,510
1981	1,255	5,750	3,020	4,580	14,605
1982	770	4,625	2,755	3,510	11,660
1983	575	3,415	2,750	3,615	10,355
1984	615	3,045	2,830	3,355	9,845
1985	425	3,020	2,715	3,180	9,346
1986	915	3,520	2,715	3,730	10,880
1987	1,120	3,375	2,710	3,110	10,315
1988	1,601	3,554	2,797	3,890	11,842

(1) Not available prior to 1959.

Source: BP Statistical Review of World Energy, Annual.

THE ROLE OF MIDDLE EAST AND AFRICAN OIL ON WESTERN EUROPEAN AND JAPANESE CONSUMPTION
(Thousands of Barrels Per Day)

	WESTERN EUROPE			JAPAN		
Year	Consumption	From the Middle East	From Africa	Consumption	From the Middle East	From Africa
1961	4,453	2,855	430	821	610	--
1962	5,128	3,060	740	934	720	--
1963	5,890	3,400	1,125	1,212	920	--
1964	6,692	3,740	1,565	1,484	1,115	--
1965	7,525	4,195	2,040	1,743	1,435	--
1966	8,360	4,375	2,540	1,979	1,650	5
1967	8,937	4,605	2,700	2,144	2,035	--
1968	9,958	5,065	3,535	2,660	2,650	5
1969	11,378	5,780	4,370	3,250	3,055	15
1970	12,364	6,220	5,330	3,847	3,485	50
1971	12,912	7,685	4,430	4,179	3,810	60
1972	13,847	8,570	3,900	4,364	3,770	75
1973	14,492	10,350	3,575	5,071	4,385	130
1974	13,681	10,195	3,215	4,960	4,050	170
1975	12,603	8,815	2,365	4,502	3,675	140
1976	13,448	9,405	2,540	4,771	3,955	70
1977	14,235	8,855	2,580	5,345	4,095	25
1978	14,630	8,685	2,555	5,420	4,012	10
1979	15,037	8,685	2,880	5,480	4,155	15
1980	13,826	7,275	2,430	4,960	3,560	70
1981	12,775	5,750	2,010	4,695	3,020	95
1982	12,210	4,625	2,200	4,395	2,755	45
1983	11,940	3,415	2,430	4,390	2,750	45
1984	12,050	3,045	2,615	4,565	2,830	25
1985	11,865	3,020	2,690	4,380	2,715	55
1986	12,340	3,520	2,895	4,435	2,715	30
1987	12,345	3,375	2,445	4,435	2,710	45
1988	12,480	3,554	2,724	4,760	2,797	64

Source: 1961-1980: Westurn Europe and Japanese Consumption: U.S. Department of Energy, International Petroleum Annual
1981-1986: Western Europe and Japanese Consumption: BP Statistical Review of World Energy
1961-1986: Middle East and African Exports: BP Statistical Review of World Energy
1987-1988: BP Statistical Review of World Energy

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Table 6

THE ROLE OF MIDDLE EAST AND AFRICAN OIL IN WORLD EXPORTS
(Thousands of Barrels/Day)

Year	MIDDLE EAST Production	MIDDLE EAST Exports	AFRICA Production	AFRICA Exports	TOTAL WORLD Production	TOTAL WORLD Exports
1961	5,633	5,090	489	435	22,428	9,870
1962	6,186	5,585	804	765	24,334	11,285
1963	6,812	6,155	1,190	1,180	26,132	12,205
1964	7,613	6,925	1,704	1,650	28,168	13,625
1965	8,367	7,610	2,224	2,140	30,308	15,110
1966	9,338	8,625	2,821	2,765	32,936	16,890
1967	10,048	9,145	3,117	2,910	35,382	17,905
1968	11,298	10,445	3,992	3,875	38,651	20,400
1969	12,447	11,525	5,069	4,945	41,706	22,640
1970	13,957	12,715	6,069	5,805	45,805	25,420
1971	16,381	15,250	5,645	5,490	48,391	27,285
1972	18,116	16,950	5,699	5,390	50,822	30,095
1973	21,219	19,970	5,922	5,585	55,803	34,130
1974	21,882	20,050	5,452	5,170	56,268	33,330
1975	19,619	18,505	5,003	4,415	53,418	30,335
1976	22,174	20,855	5,832	5,330	58,059	34,300
1977	22,600	20,730	6,236	5,685	62,620	34,755
1978	21,415	19,730	6,115	5,495	63,085	33,860
1979	21,558	20,435	6,640	6,080	62,658	35,350
1980	18,407	17,510	6,031	5,305	59,454	31,935
1981	15,752	14,605	4,581	3,925	55,837	28,655
1982	12,664	11,660	4,465	3,670	53,092	25,565
1983	11,550	10,335	4,410	3,610	52,625	24,355
1984	11,279	9,845	4,683	3,975	53,674	24,750
1985	10,305	9,340	4,85[illegible]	4,195	52,931	25,605
1986	12,710	10,880	4,9[illegible]6	4,500	55,684	27,690
1987(1)	13,150	10,315	5,205	4,320	59,895	26,160
1988	15,065	11,842	5,[illegible]60	4,622	62,195	29,226

(1) Beginning in 1987, production figures include crude oil, shale oil, oil sands and natural gas liquids.

Source: 1961-1978: Total World, Middle East and African Production, U.S. Department of Energy, International Petroleum Annual
1979-1986: Total World, Middle East and African Production, CIA, International Energy Statistical Review
1961-1986: Total World, Middle East and African Exports, BP Statistical Review of the World Oil Industry
1987-1988: BP Statistical Review of World Energy

BASIC PETROLEUM DATA BOOK

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Table 1

ESTIMATED WORLDWIDE PRODUCTION OF CRUDE OIL
ONSHORE vs OFFSHORE
(Thousands of Barrels)

Year	Onshore Production	Offshore Production	Total World Production
1969	12,961,336	2,261,175	15,222,511
1970	13,961,668	2,757,040	16,718,708
1971	14,649,885	3,012,908	17,662,793
1972	15,346,357	3,254,388	18,600,745
1973	16,729,330	3,638,651	20,367,981
1974	17,140,035	3,397,692	20,537,727
1975	16,316,198	3,186,137	19,502,335
1976	17,661,041	3,530,499	21,191,540
1977	17,738,887	4,161,808	21,900,695
1978	17,961,621	4,196,630	22,158,251
1979	18,139,390	4,625,660	22,765,050
1980	16,754,248	5,009,916	21,764,164
1981	15,395,719	4,984,786	20,380,505
1982	14,436,115	4,942,465	19,378,580
1983	14,174,410	5,033,715	19,208,125
1984	14,040,492	5,604,192	19,644,684

(Thousands of barrels per day)

Year	Onshore Production	Offshore Production	Total World Production
1969	35,511	6,195	41,706
1970	38,251	7,554	45,805
1971	40,126	8,255	48,381
1972	41,930	8,892	50,822
1973	45,835	9,968	55,803
1974	46,957	9,310	56,267
1975	44,689	8,729	53,418
1976	48,253	9,647	57,900
1977	48,600	11,402	60,002
1978	49,210	11,498	60,708
1979	49,852	12,518	62,370
1980	45,766	13,688	59,454
1981	42,180	13,657	55,837
1982	39,551	13,561	53,092
1983	38,834	13,791	52,625
1984	38,362	15,312	53,674

Source: Total World Production, U.S. Energy Information Administration
1980-1984 production, Central Intelligence Agency
United States Offshore Production, U.S. Department of Interior and U.S. Department of Energy
Rest of World Offshore Production, Offshore Magazine

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Table 1a

ESTIMATED WORLDWIDE PRODUCTION OF CRUDE OIL
ONSHORE vs OFFSHORE
(Thousands of Barrels)

Year	Onshore Production	Offshore Production	Total World Production
1985	13,798,095	5,521,720	19,319,815
1986	15,402,270	4,922,390	20,324,660
1987	14,770,895	5,378,200	20,149,095

(Thousands of barrels per day)

Year	Onshore Production	Offshore Production	Total World Production
1985	37,803	15,128	52,931
1986	42,198	13,486	55,684
1987	40,469	14,734	55,203

Source: Total World Production, Central Intelligence Agency
United States Offshore Production, U.S. Department of Interior and U.S. Department of Energy
Rest of World Offshore Production, Offshore Magazine

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Table 2

ESTIMATED WORLDWIDE OFFSHORE PRODUCTION OF CRUDE OIL BY AREA
(Millions of Barrels)

Year	United States	Venezuela	Other Latin America	Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations(2)	Total World
1970	583.5	897.9	43.4	1,524.8	760.7	239.8	133.2	4.4	2,662.9	94.2	2,757.0
1971	625.7	908.9	69.4	1,604.0	913.4	233.9	158.4	12.0	2,921.7	91.3	3,012.9
1972	621.3	915.0	82.4	1,618.7	1,040.5	276.3	216.7	15.8	3,168.0	86.4	3,254.4
1973	583.4	985.5	65.8	1,634.7	1,282.2	323.2	287.5	24.7	3,552.2	86.1	3,638.4
1974	535.7	756.0	73.7	1,365.4	1,262.7	380.3	275.1	29.9	3,313.4	84.3	3,397.7
1975	496.5	634.0	97.4	1,228.0	1,070.3	364.9	323.2	116.5	3,102.9	83.2	3,186.1
1976	467.8	613.9	107.1	1,188.8	1,198.2	384.6	407.6	270.9	3,450.0	80.5	3,530.5
1977	439.2	456.3	107.7	1,003.1	1,648.0	490.2	549.7	396.0	4,087.0	74.8	4,161.8
1978	416.3	395.7	103.7	915.6	1,734.8	414.3	525.6	532.5	4,122.9	73.7	4,196.6
1979	398.6	383.3	255.1	1,037.0	1,934.1	355.5	490.6	736.6	4,553.8	71.9	4,625.7
1980	379.7	401.1	281.8	1,062.6	2,132.4	349.2	541.7	850.2	4,936.0	73.9	5,009.9
1981	385.4	381.1	503.0	1,269.5	1,936.3	308.8	539.5	858.5	4,912.5	72.3	4,984.8
1982	412.3	374.5	733.3	1,520.1	1,496.9	286.2	589.9	992.1	4,877.9	64.6	4,942.5
1983	426.9	411.7	747.9	1,586.5	1,322.0	296.0	604.4	1,128.7	4,969.8	63.9	5,033.7
1984	469.5	402.6	851.3	1,723.4	1,473.9	368.9	726.5	1,274.4	5,542.7	61.5	5,604.2
1985	456.1	347.1	857.4	1,660.6	1,432.6	360.6	725.3	1,253.4	5,461.5	60.2	5,521.7
1986	457.6	328.5	851.2	1,637.3	1,183.0	312.4	568.3	1,208.2	4,862.2	60.2	4,922.4
1987	436.7	387.6	847.5	1,671.8	1,337.4	396.8	661.4	1,235.2	5,302.6	75.6	5,378.2

(Thousands of barrels per day)

Year	United States	Venezuela	Other Latin America	Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations(2)	Total World
1970	1,599	2,460	119	4,178	2,084	657	365	12	7,296	258	7,554
1971	1,714	2,490	190	4,394	2,503	641	434	33	8,005	250	8,255
1972	1,698	2,500	225	4,423	2,843	755	592	43	8,656	236	8,892
1973	1,598	2,700	180	4,478	3,513	885	788	68	9,732	236	9,968
1974	1,468	2,071	202	3,741	3,460	1,042	754	82	9,079	231	9,310
1975	1,360	1,737	267	3,364	2,932	1,000	886	319	8,501	228	8,729
1976	1,278	1,677	293	3,248	3,542	783	1,114	740	9,427	220	9,647
1977	1,203	1,250	295	2,748	4,960	898	1,506	1,085	11,197	205	11,402
1978	1,141	1,084	284	2,509	5,195	693	1,440	1,459	11,296	202	11,498
1979	1,092	1,050	699	2,841	5,149	974	1,344	2,018	12,326	192	12,518
1980	1,037	1,096	770	2,903	5,826	954	1,480	2,323	13,486	202	13,688
1981	1,056	1,044	1,378	3,478	5,305	846	1,478	2,352	13,459	198	13,657
1982	1,130	1,026	2,009	4,165	4,101	784	1,616	2,718	13,364	177	13,541
1983	1,170	1,128	2,049	4,347	3,622	811	1,656	3,092	13,616	175	13,791
1984	1,283	1,100	2,326	4,709	4,027	1,008	1,985	3,482	15,144	168	15,312
1985	1,250	951	2,349	4,550	3,925	988	1,987	3,434	14,963	165	15,128
1986	1,264	900	2,332	4,496	3,241	856	1,557	3,310	13,321	165	13,486
1987	1,196	1,062	2,322	4,580	3,664	1,087	1,812	3,384	14,527	207	14,734

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(1) Data not available for prior years.
(2) Only the U.S.S.R. is reported having offshore production until 1978, when China began reporting.

Source: United States Production: 1970-1971, U.S. Geological Survey; 1972-1987, U.S. Energy Information Administration
Rest of World--Offshore Magazine.

Section XI
Table 3

PRODUCTION AND VALUE OF U.S. CRUDE OIL AND CONDENSATE ONSHORE - OFFSHORE

Year	PRODUCTION (Thousands of Barrels)			DOLLAR VALUE AT WELLHEAD (Thousands ofDollars)		
	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
Cumulative to 1953	47,367,775	445,942	47,813,717	$81,119,901	$ 763,977	$ 81,883,878
1954	2,266,163	48,825	2,314,988	6,289,428	135,502	6,424,930
1955	2,423,885	60,543	2,484,428	6,702,949	167,431	6,870,380
1956	2,542,152	75,131	2,617,283	7,054,406	208,519	7,262,925
1957	2,531,581	85,320	2,616,901	7,815,875	263,384	8,079,259
1958	2,361,047	87,940	2,448,987	7,114,958	265,015	7,379,973
1959	2,471,886	102,704	2,574,590	7,175,225	298,111	7,473,336
1960	2,452,659	122,274	2,574,933	7,067,797	352,384	7,420,181
1961	2,483,272	138,486	2,621,758	7,165,968	399,614	7,565,582
1962	2,503,979	172,210	2,676,189	7,273,791	500,260	7,774,051
1963	2,554,958	197,765	2,752,723	7,393,484	572,259	7,965,743
1964	2,569,436	217,386	2,786,822	7,391,746	625,332	8,017,078
1965	2,606,936	241,578	2,848,514	7,466,393	691,905	8,158,298
1966	2,726,037	301,726	3,027,763	7,856,835	869,588	8,726,423
1967	2,847,820	367,922	3,215,742	8,303,050	1,072,677	9,375,727
1968	2,857,058	471,984	3,329,042	8,406,116	1,388,710	9,794,826
1969	2,841,469	530,282	3,371,751	8,786,876	1,639,804	10,426,680
1970	2,933,985	583,465	3,517,450	9,320,228	1,853,498	11,173,726
1971	2,828,217	625,697	3,453,914	9,574,694	2,118,304	11,692,998
1972	2,834,053	621,315	3,455,368	9,601,562	2,101,948	11,706,510
1973	2,777,538	583,365	3,360,903	10,791,444	2,266,461	13,057,905
1974	2,666,887	535,698	3,202,585	17,970,771	3,609,778	21,580,549

(1) Total dollar value distributed in proportion to percentages of production onshore and offshore

Source: Total U.S. Production and Total Dollar Value at Wellhead, U.S. Bureau of Mines
U.S. Offshore Production, 1973-1974, U.S. Bureau of Mines; All other years, U.S. Geological Survey
Distribution of production and value computed by the American Petroleum Institute

PRODUCTION AND VALUE OF U.S. CRUDE OIL AND CONDENSATE
ONSHORE - OFFSHORE

Year	PRODUCTION (Thousands of Barrels) Onshore	Offshore	Total	DOLLAR VALUE AT WELLHEAD (Thousands of Dollars) Onshore(1)	Offshore(1)	Total
1975	2,560,242	496,537	3,056,779	$19,361,086	$ 3,754,973	$23,116,059
1976	2,508,356	467,824	2,976,180	20,420,899	3,808,641	24,229,540
1977	2,546,187	439,173	2,985,360	21,996,649	3,794,073	25,790,722
1978	2,761,891	416,325	3,178,216	24,747,514	3,730,310	28,477,824
1979	2,722,715	398,595	3,121,310	34,064,477	4,986,855	39,051,332
1980	2,766,716	379,649	3,146,365	57,791,998	7,930,018	65,722,016
1981	2,743,203	385,421	3,128,624	87,151,743	12,244,641	99,396,384
1982	2,744,432	412,283	3,156,715	78,270,757	11,758,641	90,029,512
1983	2,744,080	426,919	3,170,999	71,867,673	11,180,818	83,048,491
1984	2,780,219	469,477	3,249,696	71,991,425	12,110,707	84,102,132
1985	2,818,450	456,103	3,274,553	67,868,276	10,982,960	78,851,236
1986	2,710,628	457,624	3,168,252	34,316,550	5,793,520	40,110,070
1987	2,610,699	436,679	3,047,378	40,244,801	6,715,294	46,960,095

(1) Total dollar value distributed in proportion to percentages of production onshore and offshore.

Source: U.S. Energy Information Administration, Annual Petroleum Statements and Petroleum Supply Annuals. Distribution of production and value computed by the American Petroleum Institute.

Section XI
Table 4

ESTIMATED WORLDWIDE PRODUCTION OF NATURAL GAS
ONSHORE vs OFFSHORE
(Millions of cubic feet)

Year	Onshore Production	Offshore Production	Total World Production
1970	32,763,671	5,330,290(1)	38,093,961
1971	N.A.	N.A.	41,188,396
1972	N.A.	N.A.	43,524,559
1973	N.A.	N.A.	46,143,601
1974	N.A.	N.A.	47,178,520
1975	39,985,557	7,532,217	47,517,774
1976	37,455,724	10,849,960	48,305,684
1977	42,518,548	7,581,542	50,100,090
1978	42,210,443	9,538,859	51,749,302
1979	42,748,966	10,0092,084	52,841,050
1980	43,949,440	10,189,646	54,139,086
1981	43,326,868	10,787,132	54,115,000
1982	43,023,688	10,671,312	53,695,000
1983	45,280,283	10,488,325	55,768,608
1984	45,406,112	13,186,128	58,592,240

(Millions of cubic feet per day)

Year	Onshore Production	Offshore Production	Total World Production
1970	89,763	14,604	104,367
1971	N.A.	N.A.	112,845
1972	N.A.	N.A.	118,920
1973	N.A.	N.A.	126,421
1974	N.A.	N.A.	129,256
1975	109,550	20,636	130,186
1976	102,338	29,645	131,983
1977	116,490	20,771	137,261
1978	115,645	26,134	141,779
1979	117,120	27,650	144,770
1980	120,080	27,841	147,921
1981	118,706	29,554	148,260
1982	117,874	29,236	147,110
1983	124,407	28,384	152,791
1984	126,763	33,325	160,088

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(1) Reflects Free World offshore production since Communist Nation production figures are not available prior to 1973.

Source: Offshore Production, Offshore Magazine and U.S. Department of Interior
Total World Production, 1970-78, U.S. Energy Information Administration, World Natural Gas
1979-80, Central Intelligence Agency, International Energy Statistical Review
1981-84, British Petroleum, BP Statistical Reveiw of World Energy

Section XI
Table 4a

ESTIMATED WORLDWIDE PRODUCTION OF NATURAL GAS
ONSHORE vs OFFSHORE
(Millions of cubic feet)

Year	Onshore Production	Offshore Production	Total World Production
1985	47,799,258	13,186,128	60,383,680
1986	49,132,600	12,348,680	61,481,280
1987	53,546,100	11,929,660	65,475,760
		(Millions of cubic feet per day)	
1985	131,322	34,113	165,435
1986	134,610	33,832	168,442
1987	146,702	32,684	179,386

Source: Offshore Production, Offshore Magazine and U.S. Department of Interior
Total World Production, BP Statistical Review of World Energy

Section XI
Table 5

ESTIMATED WORLDWIDE OFFSHORE PRODUCTION OF NATURAL GAS BY AREA
(Billions of cubic feet)

Year	WESTERN HEMISPHERE United States	Latin America	Total	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1970	3,287.4	27.6	3,315.0	1,568.0	28.7	22.2	396.5	5,330.3	N.A.	N.A.
1971	3,590.9	26.8	3,617.7	214.3	N.A.	35.8	654.9	N.A.	N.A.	N.A.
1972	3,883.9	26.3	3,910.2	252.6	N.A.	44.6	937.1	N.A.	N.A.	N.A.
1973	3,976.5	28.3	4,004.8	263.4	N.A.	102.8	1,095.0	N.A.	244.6	N.A.
1974	4,246.5	39.9	4,286.4	259.7	N.A.	135.9	1,314.0	N.A.	264.6	N.A.
1975	4,164.7	54.0	4,218.7	1,396.1	114.6	132.1	1,388.1	7,249.7	282.5	7,532.2
1976	4,315.4	123.3	4,438.7	259.9	183.0	233.9	5,406.2	10,521.7	328.3	10,850.0
1977	4,496.9	134.7	4,631.6	334.0	79.9	464.6	1,707.8	7,218.0	363.5	7,581.5
1978	5,134.0	219.7	5,353.8	365.4	80.7	897.5	2,453.2	9,150.5	388.4	9,538.9
1979	5,444.9	201.5	5,646.4	362.1	182.6	759.9	2,717.4	9,668.3	423.8	10,092.1
1980	5,382.2	223.3	5,605.5	546.1	185.9	712.6	2,691.2	9,741.3	448.4	10,189.6
1981	5,546.5	495.3	6,041.8	259.2	123.7	793.5	3,082.8	10,301.0	486.2	10,787.1
1982	5,466.1	576.0	6,042.1	115.7	211.7	832.9	3,081.3	10,283.7	518.3	10,802.0
1983	4,734.8	583.6	5,318.4	529.3	304.4	1,190.6	3,181.3	10,524.0	540.9	11,064.9
1984	5,220.1	1,260.1	6,480.2	504.4	279.6	1,420.4	4,081.6	12,766.2	556.3	13,322.5
1985	4,631.8	1,252.0	5,883.8	504.4	279.2	1,416.6	4,070.5	12,154.5	538.4	12,692.9
1986	4,588.6	1,023.1	5,611.7	460.1	273.4	1,961.5	4,098.6	11,405.3	474.5	12,879.8
1987	4,389.2	1,006.8	5,396.0	497.5	92.0	1,821.0	3,611.7	11,412.2	511.0	11,929.2
				(Millions of cubic feet per day)						
1970	9,007	75	9,082	4,296	79	61	1,086	14,604	N.A.	N.A.
1971	9,838	73	9,911	587	N.A.	98	1,794	N.A.	N.A.	N.A.
1972	10,612	72	10,684	690	N.A.	122	2,560	N.A.	N.A.	N.A.
1973	10,894	78	10,972	722	N.A.	282	3,000	N.A.	670	N.A.
1974	11,634	109	11,743	711	N.A.	372	3,600	N.A.	725	N.A.
1975	11,410	148	11,558	3,825	314	362	3,803	19,862	774	20,636
1976	11,791	337	12,128	710	500	639	14,771	28,748	897	29,645
1977	12,320	369	12,689	915	219	1,273	4,679	19,775	996	20,771
1978	14,066	602	14,668	1,001	221	2,459	6,721	25,070	1,064	26,134
1979	14,918	552	15,470	992	500	2,082	7,445	26,489	1,161	27,650
1980	14,706	610	15,316	1,492	508	1,947	7,353	26,616	1,225	27,841
1981	15,196	1,357	16,553	710	339	2,174	8,446	28,222	1,332	29,554
1982	14,935	1,488	16,423	317	580	2,282	8,442	28,044	1,420	29,464
1983	12,297	1,599	13,896	1,450	834	3,262	8,716	28,158	1,482	29,640
1984	14,430	3,443	17,873	1,382	764	3,675	10,875	34,569	1,520	36,089
1985	12,690	3,430	16,120	1,382	765	3,881	11,152	33,300	1,475	34,775
1986	12,537	2,803	15,340	1,257	749	5,374	11,229	33,949	1,300	35,249
1987	12,025	2,758	14,783	1,363	252	4,989	9,895	31,282	1,400	32,682

N.A. Not Available

Source: U.S. Production--U.S. Department of Interior, Minerals Management Service.
Rest of World--Offshore Magazine .

Section XI
Table 6

PRODUCTION AND VALUE OF U.S. NATURAL GAS
ONSHORE - OFFSHORE

Year	PRODUCTION (Millions of Cubic Feet)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
Cumulative to 1953	142,838,325	91,675	142,930,000	$ --	$ --	$ --
1954	8,671,935	70,611	8,742,546	875,370	7,131	882,501
1955	9,296,219	109,132	9,405,351	967,008	11,349	978,357
1956	9,957,253	124,670	10,081,923	1,070,405	13,407	1,083,812
1957	10,527,855	152,403	10,680,258	1,184,610	17,149	1,201,759
1958	10,806,671	223,607	11,030,298	1,290,786	26,706	1,317,492
1959	11,732,065	314,050	12,046,115	1,516,214	40,856	1,556,800
1960	12,362,872	408,166	12,771,038	1,732,763	57,207	1,789,970
1961	12,802,998	451,027	13,254,025	1,928,309	67,932	1,996,241
1962	13,246,639	629,983	13,876,622	2,047,904	97,397	2,145,301
1963	13,906,600	759,959	14,666,559	2,207,391	120,639	2,328,030
1964	14,622,301	839,842	15,462,143	2,257,990	129,699	2,387,689
1965	15,108,715	931,038	16,039,753	2,349,734	144,808	2,494,542
1966	15,846,670	1,359,958	17,206,628	2,489,133	213,626	2,702,759
1967	16,472,127	1,699,198	18,171,325	2,710,170	279,571	2,989,741
1968	17,002,857	2,319,543	19,322,400	2,788,319	380,369	3,168,688
1969	17,952,811	2,745,429	20,698,240	2,997,262	458,353	3,455,615
1970	18,633,254	3,287,388	21,920,642	3,183,940	561,740	3,745,680
1971	19,352,162	3,590,850	22,943,012	3,446,063	639,419	4,085,482
1972	18,647,813	3,883,885	22,531,698	3,459,876	720,586	4,180,462
1973	18,671,095	3,976,454	22,647,549	4,034,771	859,301	4,894,072
1974	17,354,017	4,246,505	21,600,522	5,281,137	1,292,265	6,573,402

(1) Total dollar value distributed in proportion to percentage of production onshore and offshore.

Sources: U.S. Total Production and Total Dollar Value at the Wellhead, U.S. Bureau of Mines
U.S. Offshore Production, U.S. Geological Survey
Distribution of production and value computed by the American Petroleum Institute

Section XI
Table 6a

PRODUCTION AND VALUE OF U.S. NATURAL GAS
ONSHORE - OFFSHORE

Year	PRODUCTION (Millions of Cubic Feet)			DOLLAR VALUE AT WELLHEAD (Thousands of Dollars)		
	Onshore	Offshore	Total	Onshore(1)	Offshore(1)	Total
1975	15,943,934	4,164,727	20,108,661	$ 7,092,450	$ 1,852,612	$ 8,945,062
1976	15,637,042	4,315,396	19,952,438	9,069,032	2,502,744	11,571,776
1977	15,528,536	4,496,927	20,025,463	12,272,078	3,553,876	15,825,954
1978	14,839,994	5,134,039	19,974,033	13,430,116	4,616,384	18,076,500
1979	15,026,356	5,444,904	20,471,260	17,699,890	6,413,744	24,113,634
1980	14,996,551	5,382,236	20,378,787	23,586,880	8,465,302	32,052,182
1981	14,631,239	5,546,462	20,177,701	28,969,884	10,981,964	39,951,848
1982	13,053,625	5,466,050	18,519,675	32,075,219	13,421,546	45,496,765
1983	12,087,301	4,734,843	16,822,144	31,358,731	12,255,638	43,614,369
1984	13,009,577	5,220,061	18,229,638	34,560,892	13,843,719	48,404,611
1985	12,566,243	4,631,756	17,197,999	31,566,479	11,616,119	43,182,598
1986	12,202,344	4,588,566	16,790,910	23,705,889	8,901,936	32,607,825
1987	12,959,357	4,389,180	17,348,537	21,579,807	7,308,823	28,888,630

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(1) Total dollar value distributed in proportion to percentage of production onshore and offshore

Source: U.S. Energy Information Administration, Natural Gas Annuals
Distribution of production and value computed by the American Petroleum Institute

TOTAL OFFSHORE WELLS DRILLED IN THE UNITED STATES(1)
FEDERAL AND STATE LEASES
Alltime to January 1, 1989

	EXPLORATORY WELLS				DEVELOPMENT WELLS				TOTAL WELLS			
	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total
ALASKA												
State	19	7	56	82	267	15	33	315	286	22	89	397
Federal	1	--	25	26	1	--	3	4	2	--	28	30
Total	20	7	81	108	268	15	36	319	288	22	117	427
CALIFORNIA												
State	20	10	139	169	3205	22	310	3537	3225	32	449	3706
Federal	25	0	162	187	381	6	21	408	406	6	183	595
Total	45	10	301	356	3586	28	331	3945	3631	38	632	4301
OREGON												
Federal	--	--	8	8	--	--	--	--	--	--	8	8
WASHINGTON												
State	--	--	2	2	--	--	--	--	--	--	2	2
Federal	--	--	4	4	--	--	--	--	--	--	4	4
Total	--	--	6	6	--	--	--	--	--	--	6	6
PACIFIC COAST												
Federal	2	--	39	41	11	--	--	11	13	--	39	52
PACIFIC OCEAN												
State	39	17	197	253	3472	37	343	3852	3511	54	540	4105
Federal	28	--	238	266	393	6	24	423	421	6	262	689
Total	67	17	435	519	3865	43	367	4275	3932	60	802	4794
FLORIDA												
State	--	--	15	15	--	--	--	--	--	--	15	15
Federal	--	--	9	9	--	--	--	--	--	--	9	9
Total	--	--	24	24	--	--	--	--	--	--	24	24
LOUISIANA												
State	63	107	988	1158	1901	565	825	3291	1964	672	1813	4449
Federal	211	294	3515	4020	6719	4016	4176	14911	6930	4310	7691	18931
Total	274	401	4503	5178	8620	4581	5001	18202	8894	4982	9504	23380
TEXAS												
State	35	189	725	949	53	153	126	332	88	342	851	1281
Federal	11	107	1176	1294	60	364	617	1041	71	471	1793	2335
Total	46	296	1901	2243	113	517	743	1373	159	813	2644	3616

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(1) Offshore wells are defined as those producing from beyond natural shore lines.

Source: American Petroleum Institute

TOTAL OFFSHORE WELLS DRILLED IN THE UNITED STATES(1)
FEDERAL AND STATE LEASES
Alltime to January 1, 1989

	EXPLORATORY WELLS				DEVELOPMENT WELLS				TOTAL WELLS			
	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total
N. GULF OF MEXICO												
State	1	0	0	1	1	0	0	1	2	0	0	2
Federal	8	11	238	257	50	15	52	117	58	26	290	374
Total	9	11	238	258	51	15	52	118	60	26	290	376
GULF OF MEXICO												
State	99	296	1728	2123	1955	718	951	3624	2054	1014	2679	5747
Federal	230	412	4938	5580	6829	4395	4845	16069	7059	4807	9783	21649
Total	329	708	6666	7703	8784	5113	5796	19693	9113	5821	12462	27396
ALABAMA												
State	--	1	1	2	0	2	1	3	0	3	2	5
Federal	--	3	0	3	0	0	0	0	0	3	0	3
Total	--	4	1	5	0	2	1	3	0	6	2	8
ATLANTIC OCEAN												
Federal	--	--	36	36	--	--	--	--	--	--	36	36
GRAND TOTAL												
State	138	314	1926	2378	5427	757	1295	7479	5565	1071	3221	9857
Federal	258	415	5212	5885	7222	4401	4869	16492	7480	4816	10081	22377
Total	396	719	7138	8263	12649	5158	6164	23971	13045	5887	13302	32234

(1) Offshore wells are defined as those producing from beyond natural shore lines.

Source: American Petroleum Institute

ACCUMULATED PRODUCTION STATE AND FEDERAL OFFSHORE LEASES
ALLTIME TO JANUARY 1, 1987

	Oil & Lease Condensate M bbls	Percent of Total	Gas MMCF	Percent of Total
ALASKA				
State	863,190	100	1,320,514	100
Federal	--	--	--	--
CALIFORNIA				
State	1,997,624	84	767,152	76
Federal	368,973	16	242,805	24
Subtotal	2,366,597		1,009,957	
WEST COAST				
State	2,860,814	89	2,087,666	90
Federal	368,973	11	242,805	10
Subtotal	3,229,787		2,330,471	
LOUISIANA				
State	1,414,766	17	10,425,692	13
Federal	7,007,232	83	66,523,817	87
Subtotal	8,421,998		76,949,509	
TEXAS				
State	32,437	18	3,212,424	29
Federal	151,575	82	7,949,386	71
Subtotal	184,011		11,161,810	
GULF OF MEXICO				
State	1,447,203	17	13,638,116	15
Federal	7,158,807	83	74,473,203	85
Subtotal	8,606,010		88,111,319	
TOTAL				
State	4,308,017	36	15,725,782	17
Federal	7,527,780	64	74,716,007	83
GRAND TOTAL	11,835,797		90,441,790	

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 9

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	First Year Rental (Dollars)	Total Bid Per Acre (Dollars)	Average Bid Per Acre (Dollars)
10/13/54	La.	199	748,000	90	394,721	$ 116,378,476	$ 1,184,175	$ 295	$ 1,220
11/09/54	Tex.	38	111,788	19	67,149	23,357,029	201,450	348	2,209
07/12/55	Tex.	39	216,000	27	149,760	8,437,462	449,280	56	177
07/12/55	La.	171	458,095	94	252,807	100,091,263	758,442	396	2,077
07/26/59	Fla.	80	458,000	23	132,480	1,711,872	397,440	13	16
08/11/59	La.	38	81,813	19	38,820	88,035,121	388,200	2,268	10,442
02/26/60	Tex.	97	437,760	48	240,480	35,732,031	721,440	149	1,026
02/26/60	La.	288	1,173,223	99	464,046	246,909,784	1,392,159	532	2,502
03/13/62	La.	401	1,808,276	206	951,811	177,260,305	2,855,433	186	3,201
03/16/62	Tex.	30	90,720	10	28,800	557,720	86,400	19	26
03/16/62	La.	380	1,780,265	195	927,746	267,775,727	2,783,238	289	3,081
10/09/62	La.	19	33,855	9	16,178	43,887,359	161,780	2,713	8,480
05/14/63	Cal.	129	669,777	57	312,945	12,807,587	938,838	41	455
04/28/64	La.	28	34,028	23	32,673	60,340,626	326,780	1,847	10,490
10/01/64	Ore.	149	836,134	74	425,433	27,768,772	1,276,302	65	376
10/01/64	Wash.	47	253,940	27	155,420	7,764,928	466,260	50	310
03/29/66	La.	18	35,993	17	35,056	88,845,963	350,570	2,534	6,112
10/18/66	La.	52	227,898	24	104,717	99,164,930	523,600	947	3,128
12/15/66	Cal.	1	1,995	1	1,995	21,189,000	9,980	10,621	10,621
06/13/67	La.	206	971,489	158	744,456	510,079,178	2,233,458	685	6,500
02/06/68	Cal.	110	540,609	71	363,181	602,719,262	1,089,543	1,660	11,374
05/21/68	Tex.	169	728,551	110	541,304	593,899,046	1,623,915	1,097	7,602
11/19/68	La.	26	46,824	16	29,682	149,868,789	296,820	5,049	27,401
01/14/69	La.	38	96,389	20	48,505	44,037,339	485,050	908	2,161
12/16/69	La.	27	93,764	16	60,153	66,908,196	601,550	1,112	6,600
07/21/70	La.	34	73,360	19	44,642	97,769,013	446,420	2,190	8,201
12/15/70	La.	127	593,485	119	553,898	847,295,760	1,661,694	1,536	12,875
11/04/71	La.	18	55,872	11	37,222	96,304,522	372,230	2,587	18,005
09/12/72	La.	78	366,682	62	290,321	585,827,925	870,996	2,018	21,870
12/19/72	La.	132	604,029	116	535,874	1,665,519,631	1,607,661	3,108	21,630
06/19/73	La.	5	25,000	4	20,000	53,901,709	60,000	2,695	4,892
06/19/73	Tex.	124	672,643	96	527,173	1,537,495,671	1,581,519	2,916	13,491
12/20/73	Ala.	44	248,636	13	74,106	135,834,100	222,318	1,833	7,507
12/20/73	Fla.	85	489,600	62	357,120	1,100,399,131	1,071,360	3,081	36,805
12/20/73	La.	9	27,221	6	19,611	139,130,000	58,839	7,094	20,757
12/20/73	Miss.	9	51,840	6	34,560	115,702,000	103,680	3,348	7,013
03/28/74	La.	206	930,918	91	421,218	2,092,510,854	1,263,675	4,968	33,772
05/29/74	Tex.	245	1,355,678	102	565,112	1,471,851,831	1,695,336	2,605	13,372
07/30/74	La.	115	508,173	9	46,988	7,971,900	140,967	170	1,563
07/30/74	Tex.	143	790,566	10	53,253	22,264,900	159,762	418	1,108
10/16/74	La.	297	1,421,54	144	675,587	1,428,261,330	2,026,812	2,114	39,111
TOTAL		4,451	20,150,435	2,323	10,772,003	14,793,568,042	34,945,372	1,373	

Source: U.S. Department of the Interior, U.S. Geological Survey

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	Total First Year Rental (Dollars)	Average Bid Per Acre (Dollars)	Highest Bid Per Acre (Dollars)
Cumulative totals 1954-1974		4,451	20,150,435	2,323	10,772,003	$14,793,568,042	$34,945,372	$1,373	--
02/04/75	Tex.	515	2,870,344	113	626,585	274,690,955	1,897,761	438	$ 3,566
05/28/75	La.	247	1,153,772	77	355,102	207,064,050	1,065,336	583	5,085
05/28/75	Tex.	36	192,660	9	51,840	25,852,000	155,520	499	1,508
07/29/75	La.	160	762,456	43	206,701	118,360,638	620,106	573	2,732
07/29/75	Tex.	185	1,010,502	23	129,600	44,853,368	388,800	346	1,842
12/11/75	Cal.	231	1,257,593	56	310,048	417,312,141	930,147	1,346	18,260
02/18/76	La.	41	181,610	18	74,823	134,554,317	224,477	1,798	10,678
02/18/76	Tex.	31	155,702	12	63,423	37,382,176	190,270	589	2,126
02/18/76	Fla.	60	350,292	4	23,040	4,040,000	69,120	175	280
04/13/76	Ak.	189	1,008,499	76	409,057	599,836,587	1,226,718	1,369	11,023
08/17/76	MAL(1)	154	876,750	93	529,466	1,127,936,425	1,714,176	2,130	18,933
11/16/76	La.	55	225,660	39	160,819	348,037,718	482,472	2,164	23,606
11/16/76	Tex.	6	28,828	4	17,308	31,111,244	51,924	1,798	4,200
06/23/77	La.	187	867,176	97	454,711	813,891,004	1,364,130	1,790	14,454
06/23/77	Tex.	36	207,360	27	150,723	356,102,428	452,172	2,363	13,520
10/27/77	Ak.	135	768,588	87	495,307	398,471,313	1,603,584	804	13,525
03/28/78	S.Al.	224	1,275,301	43	244,813	100,743,443	792,576	412	1,650
04/25/78	La.	87	392,894	57	262,250	503,820,339	789,770	1,921	11,038
04/25/78	Tex.	58	316,833	33	176,506	229,836,554	526,513	1,300	6,312
10/31/78	Al.	18	103,375	7	40,015	17,353,000	120,045	433	1,302
10/31/78	Fla.	71	408,334	28	161,280	43,823,730	483,840	272	1,422
12/19/78	La.	79	366,427	52	248,020	512,053,605	809,453	2,065	18,778
12/19/78	Tex.	49	277,560	29	164,396	359,411,393	539,635	2,186	12,384
02/28/79	MAL(1)	109	620,557	39	222,038	40,001,631	718,848	180	6,832
06/29/79	Ca.	148	792,845	54	288,260	572,825,418	867,489	1,987	37,280
07/31/79	La.	81	361,747	53	254,497	867,937,556	763,514	3,410	35,963
07/31/79	Tx.	42	215,770	28	136,685	379,551,466	410,056	2,777	33,779
11/27/79	La.	96	433,081	72	320,719	1,653,253,077	962,190	5,155	41,320
11/27/79	Tx.	28	155,520	18	100,800	260,084,860	302,400	2,580	9,323
12/11/79	Ak.	46	172,320	24	85,776	488,691,138	277,808	5,697	43,802
12/18/79	NA(2)	116	660,409	63	358,671	816,516,546	1,161,216	2,277	34,852
09/30/80	La.	192	909,575	116	551,643	2,676,927,673	1,654,962	4,853	52,467
10/21/80	Ak.	210	1,195,569	35	199,261	109,751,073	645,120	551	3,602
11/18/80	Tx.	81	458,308	67	383,323	1,417,961,511	1,149,969	3,699	29,341
TOTAL (1954-1980)		9,358	42,857,357	3,980	19,142,130	30,779,503,142	60,525,536	1,608	

(1) Middle Atlantic
(2) North Atlantic

Source: U.S. Department of the Interior, U.S. Geological Survey, Outer Continental Shelf Statistics

U.S. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALES

Date	State	OFFERED Tracts	OFFERED Acres	LEASED Tracts	LEASED Acres	Total Bonus (Dollars)	Total First Year Rental (Dollars)	Average Bid Per Acre (Dollars)	Highest Bid Per Acre (Dollars)
05/28/81	S.Ca.	111	603,613	60	320,567	2,088,881,824	1,037,904	6,516	65,014
06/30/81(5)	Ak.	175	996,308	1	5,694	170,496	18,432	30	417
07/21/81	GOM(3)	212	1,077,913	156	799,899	2,649,628,752	2,399,736	3,312	37,444
08/04/81	So. Atl.	285	1,622,557	47	267,580	342,766,174	866,304	1,281	18,228
09/29/81	Cook In.	153	858,247	13	73,157	4,405,899	236,856	60	407
10/20/81	GOM	209	1,081,364	102	508,287	1,243,468,752	1,524,903	2,446	53,313
12/08/81	MAL	253	1,440,376	51	290,352	323,659,000	921,600	1,115	7,284
02/09/82	GOM	234	1,219,826	115	590,265	1,193,654,719	1,770,795	2,022	N.A.
06/11/82	So. Ca.	140	716,840	29	147,066	117,875,281	443,913	802	N.A.
08/05/82(4)	Atl,Ca.,Ak.	554	3,142,068	36	204,955	11,149,450	663,552	54	N.A.
10/13/82	Ak.	338	1,825,770	121	662,861	2,055,632,336	2,146,112	3,101	N.A.
11/17/82	GOM	144	732,570	56	281,213	609,178,223	843,657	2,166	N.A.
03/08/83	GOM	125	665,478	11	58,117	37,570,900	174,360	646	N.A.
03/15/83	Ak-NB	418	2,379,751	59	335,898	317,873,372	1,087,488	946	N.A.
04/12/83	Ak-SG	479	2,688,787	96	540,917	426,458,830	1,751,248	788	N.A.
04/26/83	MAL	4,050	22,664,991	37	210,648	68,410,240	681,984	325	N.A.
05/25/83	CGOM	7,050	37,156,426	623	3,089,812	3,367,606,134	9,269,616	1,090	N.A.
07/26/83	SAL	3,582	20,392,985	11	62,625	13,362,040	202,752	213	N.A.
08/24/83	WGOM	5,848	32,620,248	406	2,246,005	1,501,712,517	6,738,015	668	N.A.
11/30/83	S.Ca.	137	768,341	8	43,801	16,022,336	141,808	366	N.A.
01/05/84	EGOM	8,868	50,631,513	156	897,786	310,586,261	2,693,358	346	N.A.
04/17/84	Ak.Nav.	5,036	28,048,995	180	1,024,772	624,491,331	2,784,366	609	N.A.
04/24/84	CGOM	6,502	34,743,780	453	2,278,129	1,323,036,649	6,834,537	581	N.A.
07/18/84	WGOM	5,446	30,038,593	361	1,949,186	844,850,486	5,847,639	433	N.A.
08/22/84	AK-Diap.	1,419	7,773,447	231	1,230,486	871,964,327	2,910,184	709	N.A.
10/17/84	S.Ca.	657	3,147,352	23	114,363	62,121,252	347,157	543	N.A.
05/22/85	CGOM	4,531	24,006,157	409	2,076,907	1,079,377,760	6,230,829	520	N.A.
08/14/85	WGOM	4,879	27,199,074	195	1,075,188	359,175,656	3,225,597	334	N.A.
12/18/85	EGOM	6,344	35,823,478	63	359,948	100,911,298	1,079,844	280	N.A.
04/30/86	CGOM	5,837	31,382,152	101	504,806	130,276,757	1,514,442	258	
08/27/86	WGOM	4,887	27,287,951	41	229,612	56,817,990	688,839	247	
TOTAL (1954-1986)		88,277	478,157,910	8,231	41,627,654	52,932,599,938	128,603,363	N.A.	N.A.

(1) Middle Atlantic
(2) North Atlantic
(3) Gulf of Mexico
(4) Resale

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

U.S. OUTER CONTINENTAL SHELF
REVENUE AND PRODUCTION VALUE
PERCENTAGE CUMULATIVE REVENUE OF CUMULATIVE PRODUCTION VALUE
CALENDAR YEARS
(Thousands of Dollars)

Year All States	Bonuses	Minimum Royalties	Rentals	Shut-in Gas Payments	Royalties	Total Revenue	Total Cumulative Revenue	Total Production Value	Cumulative Production Value
1953	--	--	1,359.6	30.7	967.9	2,358.2	2,358.2	5,036.9	5,036.9
1954	140,969.0	--	3,855.3	87.0	2,749.0	147,660.3	150,018.4	14,370.1	19,407.0
1955	108,528.7	--	3,406.4	122.0	5,140.0	117,197.1	267,215.5	27,060.7	46,467.6
1956	--	--	4,006.2	80.0	7,629.4	11,715.5	278,931.0	39,497.9	85,965.5
1957	--	68.6	3,270.1	110.3	11,391.2	14,840.2	293,771.3	61,072.6	147,038.1
1958	--	184.4	2,420.6	121.2	17,423.9	20,150.1	313,921.3	96,471.1	243,509.2
1959	89,747.0	171.0	2,285.7	85.0	26,540.0	118,828.7	432,750.1	150,472.5	393,981.8
1960	282,717.1	317.0	3,603.1	49.4	37,095.3	323,781.8	756,531.9	200,969.6	594,951.4
1961	--	314.1	3,073.9	37.1	47,920.3	51,345.4	807,877.3	273,636.6	868,587.8
1962	489,481.1	517.7	8,412.2	62.2	66,096.3	564,569.6	1,372,446.9	376,675.9	1,245,263.7
1963	12,807.6	668.3	8,435.2	53.0	76,999.2	98,963.3	1,471,410.2	450,866.5	1,696,130.2
1964	95,874.3	820.3	9,798.6	45.8	88,400.2	194,939.3	1,666,349.4	506,783.5	2,202,913.7
1965	33,740.3	1,072.7	8,731.4	38.5	102,862.5	146,445.4	1,812,794.8	594,222.7	2,797,136.5
1966	209,199.9	1,367.3	6,869.3	41.7	136,987.5	354,465.7	2,167,260.5	801,724.6	3,598,861.1
1967	510,109.7	1,891.5	6,208.9	41.4	157,607.6	675,859.2	2,843,119.7	947,214.7	4,546,075.8
1968	1,346,487.1	2,145.2	8,230.8	52.3	201,136.9	1,558,052.3	4,401,172.0	1,179,912.2	5,725,988.0
1969	111,660.7	1,923.6	8,312.6	41.7	240,090.7	362,029.2	4,763,201.2	1,443,870.5	7,169,858.4
1970	945,064.3	1,745.9	8,607.9	47.7	283,494.6	1,238,960.8	6,002,162.0	1,707,593.5	8,877,451.9
1971	96,304.5	1,891.0	7,742.0	32.3	350,042.5	456,012.3	6,458,174.3	2,135,677.1	11,013,129.0
1972	2,251,347.6	2,019.5	7,984.9	49.6	363,556.3	2,624,957.9	9,083,132.1	2,229,179.1	13,242,308.1
1973	3,082,462.6	2,391.2	8,948.8	52.7	401,126.1	3,494,981.4	12,578,113.6	2,486,864.9	15,729,172.9
1974	5,022,860.8	2,048.4	13,532.8	32.6	560,283.9	5,598,758.4	18,176,872.0	3,570,054.0	19,299,226.9
TOTAL All States	14,829,362.8	21,557.9	139,096.2	1,313.7	3,185,541.5	18,176,872.0	18,176,872.0	19,299,226.9	19,299,226.9

NOTE: Revenue = charges and/or collection--bonuses and first year rentals adjusted from book transfer dates (years) to Geological Survey from Bureau of Land Management, to actual sales dates. Distribution of escrow funds totaling $39,316,545 to the State of Louisiana and Lessees, pursuant to Supreme Court decree dated December 31, 1965, was not deducted from calendar year 1966 revenue charges, nor was the production value of $157 million deducted. 1970 bonuses increased $951,875 and rentals increased $22,500--leases on appeal validated.

Source: U.S. Department of Interior, U.S. Geological Survey, Outer Continental Shelf Statistics, June 1975

U.S. OUTER CONTINENTAL SHELF
REVENUE AND PRODUCTION VALUE
PERCENTAGE CUMULATIVE REVENUE OF CUMULATIVE PRODUCTION VALUE
CALENDAR YEARS
(In Thousands of Dollars)

Year All States	Bonuses	Minimum Royalties	Rentals	Shut-in Gas Payments	Royalties	Total Revenue	Total Cumulative Revenue	Total Production Value	Total Cumulative Production Value
Cumulative 1953-1974	$14,829,362.8	$21,557.9	$139,096.2	$1,313.7	$3,185,541.5	$18,176,872.0	$18,176,872.0	$19,299,226.9	$19,299,226.9
1975	1,088,133.2	2,085.9	17,522.0	39.5	594,725.5	1,723,325.1	19,900,196.9	3,924,914.9	23,224,141.8
1976	2,242,898.5	2,128.3	23,370.5	38.4	660,392.7	2,967,860.5	22,868,057.4	4,402,440.0	27,626,581.8
1977	1,568,564.7	1,679.0	19,830.0	21.1	890,469.8	2,509,742.3	25,377,799.7	5,744,056.4	33,400,638.3
1978	1,767,042.1	2,207.2	21,512.7	4.0	1,139,198.2	2,941,111.9	28,318,911.6	7,096,500.1	40,497,138.3
1979	5,078,861.7	2,088.5	20,287.3	6.6	1,512,017.2	6,616,592.1	34,935,503.7	9,273,278.3	49,770,416.6
1980	4,204,640.3	2,291.4	19,062.5	--	2,132,528.7	6,362,657.6	41,298,161.3	13,055,515.8	62,825,932.5
1981	6,652,980.9	2,250.3	21,731.0	--	3,287,279.4	9,965,512.5	51,263,673.7	20,199,823.2	83,025,755.7
1982	3,987,490.0	2,393.8	20,055.2	--	3,814,871.6	7,824,810.6	59,088,484.3	22,573,099.1	105,598,854.8
1983	5,749,016.4	4,463.7	32,463.1	--	3,454,318.1	9,240,261.2	68,328,745.5	21,540,887.5	127,139,742.3
1984	4,037,050.3	3,458.1	35,607.8	--	3,914,724.6	8,040,297.0	76,369,042.5	24,001,446.1	151,141,188.4
1985	1,539,464.7	4,067.3	61,814.6	--	3,612,782.8	5,244,160.0	81,613,202.5	22,153,297.0	173,294,685.5
1986	187,094.7	5,176.6	52,958.2	--	2,533,376.7	2,804,890.2	84,711,161.6	15,711,161.6	189,005,847.0
TOTAL ALL STATES:	52,932,599.9	55,847.9	485,311.2	1,423.3	30,663,838.2	84,418,092.7	81,559,305.0	189,005,847.0	189,005,847.0

Source: U.S. Department of the Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 11

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE	TOTAL AMOUNT OF ALL BIDS RECEIVED	TOTAL BONUS
10/13/54	LA.	$ 302,924,834	$ 116,378,476
11/9/54	TEX.	73,801,896	23,357,029
TOTAL		376,726,730	139,735,505
7/12/55	TEX.	9,027,610	8,437,462
7/12/55	LA.	314,212,441	100,091,264
TOTAL		323,240,051	108,528,726
5/26/59	FLA.	1,711,872	1,711,872
8/11/59	LA.	174,411,628	88,035,120
TOTAL		176,123,500	89,746,992
2/24/60	TEX.	56,400,897	35,732,031
2/24/60	LA.	518,774,752	246,909,784
TOTAL		575,175,649	282,641,815
3/13/62	LA.	314,218,540	177,260,305
3/16/62	TEX.	557,720	557,720
3/16/62	LA.	604,799,998	267,775,677
10/9/62	LA.	66,265,290	43,887,359
TOTAL		985,841,548	489,481,061
5/14/63	CAL.	13,989,953	12,807,587
4/28/64	LA.	93,850,051	60,340,626
10/1/64	ORE.	43,049,543	27,768,772
10/1/64	WASH.	10,530,210	7,764,928
TOTAL		147,429,804	95,874,326
3/29/66	LA.	275,384,739	88,845,963
10/18/66	LA.	185,214,816	99,164,930
12/15/66	CAL.	89,937,020	21,189,000
TOTAL		550,536,575	209,199,893
6/13/67	LA.	1,627,749,269	510,079,178
2/6/68	CAL.	1,293,601,113	602,719,262
5/21/68	TEX.	1,620,393,212	593,899,046
11/19/68	LA.	398,430,736	149,868,789
TOTAL		3,312,425,061	1,346,487,097
1/14/69	LA.	71,036,938	44,037,339
12/16/69	LA.	230,460,743	66,908,196
TOTAL		301,497,681	110,945,535

Source: U.S. Department of the Interior, Bureau of Land Management

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
7/21/70	LA.	$ 163,451,158	$ 97,769,013
12/15/70	LA.	2,877,429,559	846,784,660
TOTAL		3,040,880,717	944,553,673
11/4/71	LA.	172,735,981	96,304,523
9/12/72	LA.	1,599,155,464	585,827,925
12/19/72	LA.	6,191,018,227	1,665,519,631
TOTAL		7,962,909,672	2,347,652,057
6/19/73	TEX.-LA.	6,248,160,989	1,591,397,380
12/20/73	MISS., LA.,FLA	3,404,892,969	1,491,065,231
TOTAL		9,653,053,958	3,082,462,611
3/28/74	LA.	6,474,003,574	2,092,510,854
5/29/74	TEX.	3,354,292,556	1,471,851,831
7/30/74	LA.-TEX.	88,799,354	30,236,800
10/16/74	LA.	2,514,518,419	1,427,242,455
10/16/74	LA.ROYALTY	7,238,500	1,018,875
TOTAL		12,438,852,403	5,022,860,815
2/04/75	Texas	$ 484,721,874	$ 274,690,955
5/28/75	La.-Tex.	402,752,335	232,916,050
7/29/75	La.-Tex.	317,001,333	163,214,006
12/11/75	S. Cal.	901,960,364	417,312,141
TOTAL		2,106,435,906	1,088,133,152
2/18/76	FL., LA., TX.	428,003,629	175,976,493
4/13/76	Alaska	1,732,170,868	559,836,587
8/17/76	MAL(1)	3,153,411,802	1,127,936,425
11/16/76	La.-Tx.	833,015,950	379,148,962
TOTAL		6,146,602,249	2,242,898,467
6/23/77	La.-Tx.	2,928,091,214	1,170,093,432
10/27/77	Alaska	643,559,393	388,488,081
	(Royalty)	33,516,288	9,983,232
TOTAL		3,605,166,895	1,568,564,745
3/28/78	S. Al	150,927,700	100,743,443
4/25/78	La.-Tx.	1,559,345,259	733,656,893
10/31/78	Al. Fla., Ms.	87,592,568	61 176,730
12/19/78	La.-Tx.	2,355,263,307	871,464,998
TOTAL		4,153,128,834	1,767,042,064

(1) Middle Atlantic

Source: U.S. Department of the Interior, Minerals Management Service.

Section XI
Table 11b

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
2/28/79	MAL(1)	$ 66,005,881	$ 40,001,631
6/29/79	Ca.	994,683,700	572,825,418
7/31/79	La.-Tx.	3,333,990,620	1,247,489,022
11/27/79	La.-Tx.	4,683,195,907	1,913,337,938
12/11/79	Ak.	945,445,102	488,691,138
12/18/79	NA(2)	1,270,789,889	816,516,546
TOTAL		11,294,111,099	5,078,861,693
9/30/80	La.	7,109,464,692	2,676,927,673
10/21/80	Ak.	197,417,470	109,751,073
11/18/80	Tx.	3,500,570,271	1,417,961,511
TOTAL		10,807,452,033	4,204,640,257
5/28/81	Ca.	4,885,810,689	2,038,566,639
6/30/81(6)	Ak.	5,582,362	170,496
7/21/81	GOM(4)	5,227,548,535	2,649,628,752
8/04/81	So. Atl.	561,050,365	342,766,174
9/29/81	Co. In.	4,697,309	4,405,899
10/20/81	GOM(4)	2,402,400,552	1,243,468,752
12/08/81	MAL	578,952,000	323,659,000
TOTAL		13,666,041,812	6,602,665,712
2/09/82	GOM	2,683,699,843	1,193,654,719
6/11/82	Ca.	210,486,278	117,875,281
8/05/82	Atl.,Ca.,Ak.	14,439,195	11,149,450
10/13/82	Ak.	4,589,972,518	2,055,632,336
11/17/82	GOM	1,185,091,610	609,178,223
TOTAL		8,683,689,444	3,987,490,009
3/08/83	GOM	48,755,129	37,570,900
3/15/83	Ak.	371,803,984	317,873,372
4/12/83	Ak.	547,731,283	426,458,830
4/26/83	MAL	86,822,680	68,410,240
5/25/83	GOM	4,582,847,288	3,367,606,134
7/26/83	SAL	14,562,040	13,362,040
8/24/83	GOM	2,350,359,669	1,501,712,517
11/30/83	C.Ca.	24,045,646	16,022,336
TOTAL		8,026,927,719	5,749,016,369
1/05/84	EGOM	500,261,361	310,586,261
4/17/84	Ak.Nav.	1,148,701,653	624,491,331
4/24/84	CGOM	2,126,776,904	1,323,036,649
7/18/84	WGOM	1,263,576,675	844,850,488
8/22/84	Ak-Diap.	1,365,968,674	871,964,327
10/17/84	S. Ca.	73,163,686	62,121,252
TOTAL		6,478,448,953	4,037,050,308

(1) Middle Atlantic
(2) North Atlantic
(4) Gulf of Mexico
(6) RESALE

Source: U.S. Department of the Interior, Minerals Management Service.

U.S. OUTER CONTINENTAL SHELF OIL AND GAS SALES, TOTAL BONUS vs. TOTAL AMOUNT OF ALL BIDS RECEIVED

DATE OF SALE	STATE/AREA	TOTAL ALL BIDS RECEIVED	TOTAL BONUS
05/22/85	CGOM	$ 1,566,926,725	$ 1,079,377,760
08/14/85	WGOM	519,116,036	359,175,656
12/18/85	EGOM	155,241,798	100,911,298
TOTAL		2,241,284,559	1,539,464,714
04/30/86	CGOM	164,135,937	130,276,757
08/27/86	WGOM	69,498,490	56,817,990
TOTAL		233,634,427	187,094,747

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

ANNUAL INSTALLATIONS AND REMOVALS OF OFFSHORE PRODUCTION PLATFORMS IN FEDERAL WATERS
as of December 31, 1986

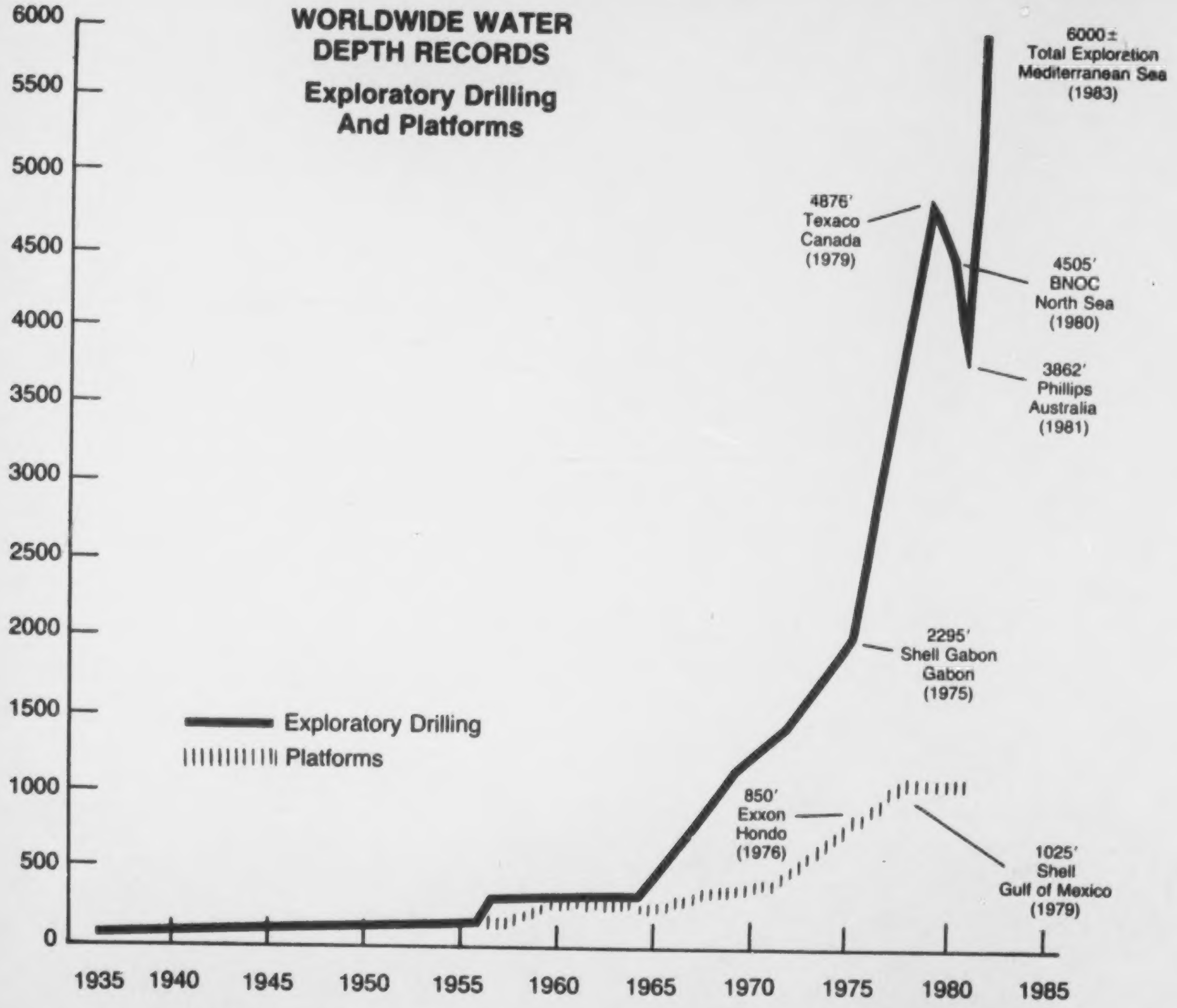
	ALASKA OCS*		ATLANTIC OCS*		GOM OCS		PACIFIC OCS		
Year	Installations	Removals	Installations	Removals	Installations	Removals	Installations	Removals	Year's Net Platform Additions
1953-60	0	0	0	0	474	7	0	0	467
1961	0	0	0	0	111	0	0	0	111
1962	0	0	0	0	123	0	0	0	123
1963	0	0	0	0	86	2	0	0	84
1964	0	0	0	0	130	0	0	0	130
1965	0	0	0	0	126	5	0	0	121
1966	0	0	0	0	116	2	0	0	114
1967	0	0	0	0	134	0	1	0	135
1968	0	0	0	0	107	1	3	0	109
1969	0	0	0	0	105	1	1	0	105
1970	0	0	0	0	124	1	0	0	123
1971	0	0	0	0	101	4	0	0	97
1972	0	0	0	0	121	6	0	0	115
1973	0	0	0	0	98	1	0	0	97
1974	0	0	0	0	52	18	0	0	34
1975	0	0	0	0	100	32	0	0	68
1976	0	0	0	0	111	31	1	0	81
1977	0	0	0	0	116	15	1	0	102
1978	0	0	0	0	164	25	0	0	139
1979	0	0	0	0	159	43	2	0	118
1980	0	0	0	0	169	32	3	0	140
1981	0	0	0	0	171	24	2	0	149
1982	0	0	0	0	192	21	0	0	171
1983	0	0	0	0	179	36	1	0	144
1984	0	0	0	0	224	47	1	0	178
1985	0	0	0	0	199	68	3	0	134
1986	0	0	0	0	97	33	1	0	65
TOTAL	0	0	0	0	3,889	455	20	0	3,454

* There is no production in the Federal Waters offshore of Alaska or on the Atlantic OCS.

NOTE: Gulf of Mexico OCS platform data includes accounting adjustments for 1983, 1984, and 1985. The 1983 removal figures reflect earlier transfers of 5 Federal wells from Federal to State jurisdiction and the conversion of 3 from production to service use. The 1985 installation total includes 47 platforms counted during audits completed in 1985.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 13



WORLDWIDE WATER DEPTH RECORDS

Exploratory Drilling And Platforms

SOURCE: Offshore Magazine, June 20, 1982

BLOWOUTS AND SPILLAGE FROM FEDERAL OFFSHORE OIL WELLS COMPARED TO ANNUAL PRODUCTION ON THE OCS, 1971-1986

Year	No. of Well Starts	Drilling Blowouts				Nondrilling Blowouts						Total No. of Blowouts	Spills in Barrels	Production in MMbbls.
		Exploration		Development		Production		Workover		Completion				
		No.	Bbl	No.	Bbl	No.	Bbl	No.	Bbl	No.	Bbl			
1971	864	2	2	0	0	2	450	1	0	0	0	5	450	418.5
1972	856	2	0	1	0	0	0	0	0	0	0	3	0	411.9
1973	829	2	0	1	0	0	0	0	0	0	0	3	0	394.7
1974	801	0	0	1	0	2	75	1	200	0	0	4	275	360.6
1975	841	4	0	0	0	0	0	1	0	1	0	6	0	330.2
1976	1,086	1	0	4	0	1	0	0	0	0	0	6	0	316.9
1977	1,220	2	0	2	0	0	0	3	0	2	0	9	0	303.9
1978	1,139	4	0	5	0	0	0	2	0	1	0	12	0	292.3
1979	1,109	3	0	2	0	0	0	0	0	0	0	5	0	285.6
1980	1,079	3	0	1	0	1	1	2	0	1	0	8	1	277.4
1981	1,109	2	0	1	0	0	0	2	64	5	0	10	64	289.8
1982	1,159	0	0	4	0	0	0	3	0	1	0	8	0	321.2
1983	1,066	3	0	4	0	0	0	1	0	1	0	9	0	348.3
1984	1,136	3	0	2	10	0	0	1	0	0	0	6	10	370.2
1985	1,040	2	0	0	0	1	40	1	0	0	0	4	40	389.3
1986	588	1	0	0	0	0	0	1	0	0	0	2	0	389.2
TOTAL	15,922	34	0	28	10	7	566	19	264	12	0	100	840	5,500.0

Note: Only crude oil and condensate blowout spillage is given here, in barrels for the 100 blowouts that occurred during the past 16 years. Production totals are given in millions of barrels (MMbbl). Information on other than oil and condensate spills may be obtained from the Chief, Offshore Rules and Operations Division, MMS, Reston, Virginia 22091.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

CRUDE AND CONDENSATE SPILLS OF ONE BARREL OR MORE IN FEDERAL WATERS
1970-1986

Year	Gulf of Mexico: No. Spills	Gulf of Mexico: Bbls. Spilled	Pacific: No. Spills	* Pacific Bbls. Spilled
1970	7	83,823	0	--
1971	10	1,110	0	--
1972	2	181	0	10,325
1973	3	21,935	0	1,825
1974	8	23,973	0	1,460
1975	0	0	0	1,460
1976	60	4,740	0	1,456
1977	60	919	0	1,458
1978	62	1,382	0	1,456
1979	94	536	0	1,456
1980	42	1,775	1	1,458
1981	50	5,503	6	1,488
1982	42	124	3	1,464
1983	59	520	3	916
1984	47	224	5	770
1985	38	581	3	374
1986	37	227	2	376

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* This column shows estimated seepage from the Santa Barbara blowout of January 28, 1969. Seepage following the blowout has been variously estimated at 10,000 to 71,500 barrels, but totals above do not include the first 10 days. The figure for 1972 includes seepage between February 7, 1969 and December 31, 1972.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

HISTORICAL DATA ON LEASING
CONTINENTAL SEABEDS ADJACENT TO THE UNITED STATES
(THOUSANDS OF SQUARE STATUTE MILES)

Region	State Lands(1)	OCS "Shelf" (Between State Limit and 200 Meter Depth)	Continental Slope (Between 200 and 2500 Meter Depths)	Total OCS
Hawaii	--	0.4(2)	3.6	4.0
Alaska	22.9	560.0	212.2	795.1
Pacific Coast States	4.5	15.0	76.2	95.7
Gulf Coast States	13.5	121.0	84.2	218.7
Atlantic Coast States	7.1	129.1	102.5	238.7
Total	48.0	825.5	478.7	1,352.2
		559,040,000Ac.	306,368,000 Ac.	865,408,000 Ac.

		Percent of OCS "Shelf"	Percent of Total OCS
TOTAL FEDERAL OCS ACREAGE EVER OFFERED FOR LEASE THROUGH 8/22/84	329,472,769	58.9	38.1
TOTAL FEDERAL OCS LEASED THROUGH 8/22/84	37,147,323	6.6	4.3
TOTAL FEDERAL OCS CURRENTLY UNDER LEASE 12/31/83(3)	18,500,000	3.3	2.1

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(1) Areas within three nautical miles of coastline, except for Texas and Gulf Coast of Florida where the boundaries are three leagues (nine nautical miles) distant.

(2) Includes state areas.

(3) Approximate acreage figure is used because of constant company relinquishments of leases--approximately 200 leases relinquished each year.

Source: Public Land Law Review Commission
"All Sales" Statistics Compiled by Bureau of Land Management, New Orleans Office, August 1981

Section XI
Table 17

FEDERAL OFFSHORE PLANNING AREAS RANKED BY MARCH 1986 REVISED CONDITIONAL MEAN ESTIMATES OF UNDISCOVERED, ECONOMICALLY RECOVERABLE RESOURCES

Ranking of OCS Areas	Estimated Acres in Millions	Marg. Prob. of H*	Oil in Barrels	Gas in Tcf	Risked Estimates in Bbls of Oil Equiv.
1. Central Gulf of Mexico	46	1.00	3.75	30.69	9.18
2. Western Gulf of Mexico	35	1.00	1.90	26.76	6.66
3. Southern California	30	1.00	1.54	2.42	1.97
4. Navarin Basin, AK	37	0.27	4.80	5.84	1.58
5. Mid-Atlantic	82	1.00	0.36	5.98	1.42
6. St. George Basin, AK	70	0.22	1.69	15.76	0.99
7. South Atlantic	99	0.25	0.86	16.18	0.94
8. Beaufort Sea, AK	52	0.70	1.28	5.62	0.89
9. Eastern Gulf of Mexico	58	1.00	0.41	2.19	0.80
10. Chukchi Sea, AK	29	0.20	2.68	15.10	0.54
11. Central California	15	0.65	0.56	0.79	0.46
12. Northern California	29	0.60	0.42	1.86	0.45
13. North Atlantic	49	0.30	0.26	5.06	0.35
14. Norton Basin, AK	25	0.15	0.64	2.94	0.17
15. N. Aleutian Basin, AK	32	0.20	0.36	2.62	0.17
16. Gulf of Alaska	133	0.08	0.54	8.34	0.16
17. Oregon/Washington	47	0.20	0.18	3.26	0.15
18. Kodiak, AK	89	0.05	0.15	2.92	0.03
19. Florida Straits	8	0.11	0.04	1.04	0.02
20. Cook Inlet, AK	5	0.03	0.21	0.35	0.01
21. Hope Basin, AK	12	0.02	0.17	1.81	0.01
22. Shumagin, AK	83	0.03	0.05	1.42	0.01
23. Aleutian Arc, AK	54	neg.	neg.	neg.	neg.
24. Aleutian Basin, AK	160	neg.	neg.	neg.	neg.
25. Bowers Basin, AK	86	neg.	neg.	neg.	neg.
26. St. Matthew-Hall, AK	51	neg.	neg.	neg.	neg.

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* Marginal probability of hydrocarbons (H), given here as a decimal fraction of 1.00 as the certainty, expresses the chance of occurrence of oil and gas in commercial volumes, using existing technology and under current economic conditions.

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics 1986.

Section XI
Table 18

U.S. OFFSHORE CRUDE OIL PRODUCTION BY STATE
(Thousands of Barrels)

Year	Alaska		California		Louisiana		Texas		Total U.S.	
	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal
1965	31.9	0	42,772.0	0	53,253.0	144,964.9	553.0	3.7	96,609.9	144,968.6
1966	2,652.7	0	53,294.0	0	56,697.4	187,831.5	367.6	882.6	113,011.7	188,714.1
1967	15,933.0	0	64,807.0	0	65,040.2	218,995.8	280.1	2,865.8	146,060.3	221,861.6
1968	52,524.6	0	83,279.0	2,059.9	66,648.9	263,825.4	536.0	3,110.6	202,988.5	268,995.9
1969	60,887.0	0	89,061.0	9,940.8	67,250.7	300,159.3	223.7	2,759.9	217,422.4	312,860.0
1970	70,472.0	0	79,504.2	24,987.6	72,063.2	333,411.5	779.5	2,247.0	222,818.9	360,646.2
1971	66,793.3	0	70,819.0	31,103.5	69,061.4	385,760.4	474.0	1,685.0	207,147.7	418,548.9
1972	64,336.6	0	73,168.5	22,562.2	71,184.6	387,590.7	739.8	1,733.0	209,429.4	411,885.9
1973	62,427.3	0	70,582.6	18,915.3	54,957.7	374,196.9	667.6	1,617.8	188,635.1	394,730.0
1974	60,630.2	0	67,206.8	16,776.7	46,688.6	342,435.5	578.1	1,381.8	175,103.7	360,594.1
1975	60,709.2	0	64,274.0	15,304.8	40,962.3	313,592.6	353.8	1,340.1	166,299.3	330,237.5
1976	55,190.9	0	56,646.1	13,978.6	38,358.2	301,887.0	708.5	1,054.6	150,903.6	316,920.1
1977	50,575.7	0	48,223.9	12,267.6	33,804.7	290,771.6	2,620.3	909.0	135,224.6	303,948.2
1978	45,712.5	0	43,524.6	12,085.9	32,365.5	278,071.5	2,457.6	2,107.6	124,060.2	292,265.0
1979	38,922.7	0	42,202.6	10,961.1	29,359.9	271,008.9	2,544.1	3,595.5	113,029.3	285,565.5
1980	32,726.5	0	39,978.9	10,198.9	27,591.9	256,688.1	1,962.6	10,502.0	102,259.9	277,389.0
1981	28,447.1	0	39,164.7	19,605.0	26,219.7	255,875.7	1,823.8	14,284.7	95,655.2	289,765.4
1982	24,680.9	0	39,810.6	28,434.2	24,825.6	275,513.5	1,754.3	17,263.8	91,071.4	321,211.5
1983	21,911.9	0	30,527.5	68,230.1	24,314.5	298,093.6	2,286.5	19,710.2	86,215.5	348,331.2
1984	19,631.0	0	39,508.3	30,254.3	26,852.7	318,024.6	2,100.6	21,960.1	88,092.8	370,239.0
1985	12,644.2	0	39,588.8	29,781.5	23,747.8	338,901.9	2,175.6	20,641.0	78,156.5	389,324.3
1986	15,349.2	0	34,697.5	29,227.8	25,719.9	340,152.3	2,091.5	19,835.9	77,858.1	389,216.0

Source: U.S. Department of Interior, Minerals Management Service, Federal Offshore Statistics, 1986.

U.S. OFFSHORE DRY NATURAL GAS PRODUCTION BY STATE(1)
(Millions of Cubic Feet)

Year	Alaska		California		Louisiana		Texas		Total U.S.	
	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal
1965	10.9	0	40,770.0	0	217,148.0	645,589.5	27,520.0	0	285,449.0	645,589.5
1966	1,200.1	0	46,839.0	0	282,848.8	965,387.8	21,623.0	42,059.4	352,510.9	1,007,447.2
1967	9,046.3	0	46,732.0	0	395,359.1	1,087,262.8	60,844.6	99,952.9	511,981.9	1,187,215.8
1968	25,806.8	0	85,765.0	799.7	493,015.1	1,413,467.6	190,778.3	109,910.8	795,365.1	1,524,178.1
1969	43,243.5	0	79,058.0	4,845.9	557,680.7	1,822,544.1	110,959.5	127,097.0	790,941.7	1,954,487.0
1970	83,139.5	0	58,892.2	12,229.1	595,318.6	2,273,147.0	131,360.8	133,300.4	868,711.1	2,418,676.6
1971	86,326.3	0	45,776.3	15,671.5	573,461.1	2,634,014.0	108,242.1	127,357.9	813,806.1	2,777,043.4
1972	76,818.6	0	34,747.1	10,033.6	603,638.1	2,881,364.7	130,126.0	147,156.5	845,329.9	3,038,554.8
1973	74,655.1	0	30,596.3	7,286.5	557,250.2	3,055,628.2	102,364.3	148,673.6	764,866.0	3,211,588.4
1974	74,672.5	0	28,931.1	5,573.6	518,580.6	3,349,170.9	109,597.3	159,979.4	731,781.5	3,514,723.9
1975	76,294.5	0	23,320.0	3,951.6	508,462.0	3,332,160.1	97,957.2	122,572.8	706,133.8	3,458,693.5
1976	74,142.8	0	18,983.9	3,475.2	512,934.9	3,499,865.9	113,411.0	92,582.4	719,472.6	3,595,923.5
1977	77,539.5	0	14,237.2	3,290.0	486,096.2	3,647,513.7	181,306.7	86,943.3	759,179.6	3,737,746.9
1978	74,910.5	0	14,196.1	3,472.3	489,728.7	4,149,731.1	170,142.6	231,857.5	748,977.9	4,385,060.9
1979	73,792.4	0	13,550.3	2,866.8	476,965.2	4,158,521.7	207,617.3	511,590.6	771,925.2	4,672,979.1
1980	64,543.2	0	13,074.7	3,107.0	408,784.2	4,013,707.4	254,377.2	624,642.5	740,779.3	4,641,457.0
1981	72,307.3	0	13,470.7	12,766.3	374,439.8	4,106,494.6	236,707.2	730,275.8	696,924.9	4,849,536.7
1982	68,372.5	0	14,007.2	17,750.9	359,349.3	3,803,740.1	246,966.9	858,020.3	688,715.9	4,679,511.3
1983	68,836.8	0	13,853.3	16,024.3	316,254.0	3,173,892.4	148,134.3	850,817.2	547,073.3	4,040,733.9
1984	68,688.2	0	13,836.6	27,806.9	313,362.3	3,578,740.6	112,090.6	931,293.6	507,977.7	4,537,841.1
1985	62,796.0	0	19,483.1	49,164.2	229,971.7	3,116,884.5	108,130.7	834,926.5	420.381.5	4,000,975.2
1986	63,351.0	0	18,252.9	42,689.0	228,128.9	2,927,832.3	115,126.3	978,370.6	424,859.1	3,948,891.8

(1) Includes casinghead gas.

Source: U.S. Department of Interior, Mineral Management Service, Federal Offshore Statistics, 1986.

BASIC PETROLEUM DATA BOOK

SECTION XII. TRANSPORTATION

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U.S. GAS UTILITY INDUSTRY
MILES OF PIPELINE AND MAIN, BY TYPE(1)
(Thousands)

Year	Field and Gathering	Transmission Pipeline	Distribution Main	Total
1947	27.1	92.9	211.5	331.4
1948	29.2	97.0	220.1	346.4
1949	30.9	102.9	230.3	364.1
1950	32.9	113.1	241.6	387.5
1951	34.7	120.5	252.5	407.7
1952	38.4	123.4	263.5	425.3
1953	41.5	130.4	274.5	446.4
1954	43.8	139.0	287.7	470.5
1955	45.7	145.9	305.1	496.7
1956	47.6	153.8	323.8	525.2
1957	50.0	160.1	338.7	548.8
1958	52.0	165.4	354.1	571.5
1959(2)	54.1	174.3	371.4	599.8
1960(3)	55.8	183.7	391.4	630.9
1961	56.7	191.9	410.4	659.0
1962	58.7	196.4	428.1	683.2
1963	60.7	200.9	448.3	709.9
1964	61.0	205.4	469.8	736.2
1965	61.7	211.3	494.5	767.5
1966	63.0	217.0	519.6	799.6
1967	63.7	225.4	539.2	828.3
1968	64.4	234.5	562.7	861.6
1969	64.9	248.1	578.6	891.6
1970	66.3	252.2	594.8	913.3
1971	66.2	254.8	610.4	931.4
1972	66.9	258.1	623.1	948.1
1973	65.9	263.1	633.8	962.9
1974	66.4	262.2	645.6	974.1
1975	68.5	262.6	648.2	979.3
1976	70.3	258.2	659.1	987.7
1977	71.5	260.5	666.9	998.9
1978	74.9	260.6	677.5	1,013.0
1979	77.8	263.5	688.5	1,029.8
1980	83.5	266.5	701.8	1,051.8
1981	86.2	269.5	714.1	1,069.8
1982	90.5	271.7	721.2	1,083.4
1983	91.9	273.5	729.7	1,095.1
1984	93.7	271.9	736.8	1,102.4

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(1) Excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of the end of each year.
(2) These figures and those for subsequent years include Hawaii.
(3) These figures and those for subsequent years include Alaska.

SOURCE: American Gas Association, Gas Facts

U.S. GAS UTILITY INDUSTRY
MILES OF PIPELINE AND MAIN, BY TYPE(1)
(Thousands)

Year	Field and Gathering	Transmission Pipeline	Distribution Main	Total
1985	94.1	271.2	753.4	1,118.7
1986	93.8	271.0	769.3	1,134.1
1987	95.5	271.9	783.8	1,151.2

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(1) Excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of the end of each year.

Source: American Gas Association, Gas Facts, Annual.

Section XII
Table 2

TOTAL CRUDE OIL AND PETROLEUM PRODUCTS TRANSPORTED IN THE U.S. BY METHOD OF TRANSPORTATION
(In Billions of Ton Miles)

	Pipelines		Water Carriers		Motor Carriers (1)		Railroads		
Year	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Total Crude and Products Ton Miles
1972	475.8	56.73	330.0	39.34	23.0	2.74	10.0	1.19	838.8
1973	507.0	60.10	296.8	35.18	25.0	2.96	14.8	1.76	843.6
1974	506.0	59.69	297.0	35.04	29.0	3.42	15.7	1.85	847.7
1975	507.0	59.88	298.0	35.02	27.6	3.26	14.1	1.66	846.7
1976	515.0	59.35	306.9	35.37	32.5	3.75	13.3	1.53	867.7
1977	546.0	59.13	333.3	36.09	29.6	3.21	14.5	1.57	923.4
1978	585.8	50.49	530.6	45.73	30.6	2.64	13.2	1.14	1,160.2
1979	608.3	51.78	522.9	44.51	30.1	2.56	13.5	1.15	1,174.8
1980	588.2	47.24	617.8	49.61	26.8	2.15	12.5	1.00	1,245.3
1981	563.7	46.27	617.2	50.66	24.9	2.04	12.6	1.03	1,218.4
1982	565.7	46.44	616.9	50.64	22.7	1.86	12.9	1.06	1,218.2
1983	556.1	45.45	630.5	51.53	25.1	2.05	11.8	0.97	1,223.5
1984	568.1	48.14	570.7	48.36	29.2	2.47	12.2	1.03	1,180.2
1985	564.3	47.20	590.4	49.39	28.7	2.40	12.1	1.01	1,195.3
1986	577.9	48.65	568.1	47.83	29.7	2.50	12.1	1.02	1,187.8

(1) Estimate.

Source: Association of Oil Pipelines, Shifts in Petroleum Transportation, 1988.

U.S. TANK SHIP FLEET (ACTUAL AND T2-SE-A1 EQUIVALENTS)
(Ocean-going vessels of 2,000 gross tons and over)

Year (1)	ACTUAL FLEET				T2-SE-A1 Equivalents
	Number	Gross Tons	Deadweight Tons	Average Speed (knots)	
Jan. 1, 1947	951	8,784,894	14,035,000	13.86	800.5
Oct. 1, 1947	744	6,995,223	11,171,400	14.07	646.4
April 1, 1948	621	5,878,786	9,395,500	14.0	541.9
Jan. 1, 1949	593	5,656,497	9,016,200	14.1	524.2
Sept. 1, 1949	578	5,439,009	8,639,800	14.4	513.2
Sept. 1, 1950	559	5,322,698	8,460,700	14.5	505.1
April 1, 1951	560	5,363,699	8,520,800	14.6	510.0
Oct. 1, 1952	550	5,284,400	8,446,400	14.6	508.3
1953	550	5,475,800	8,639,800	14.8	525.3
1954	525	5,376,500	8,446,200	15.0	521.7
1955	490	5,094,900	7,989,500	15.1	497.4
1956	477	5,040,700	7,892,700	15.2	493.4
1957	470	5,097,400	7,959,900	15.4	503.1
1958	474	5,316,100	8,309,200	15.5	529.5
1959	485	5,593,600	8,766,300	15.6	563.0
1960	478	5,664,000	8,894,600	15.7	575.0
1961	469	5,751,400	9,085,300	15.8	590.1
1962	456	5,726,900	9,045,300	15.9	589.8
1963	440	5,631,000	8,912,600	15.9	583.5
1964	422	5,553,400	8,816,300	16.0	579.3
1965	410	5,479,800	8,733,500	16.0	575.8
1966	387	5,343,700	8,549,900	16.1	566.3
1967	382	5,322,800	8,550,700	16.1	566.4
1968	380	5,337,300	8,655,700	16.1	574.6
1969	365	5,319,400	8,797,900	16.1	584.9
1970	350	5,305,800	8,911,000	16.2	593.4
1971	347	5,453,100	9,218,200	16.3	616.5
1972	328	5,411,300	9,253,300	16.4	621.0
1973	312	5,507,000	9,525,200	16.3	640.3
1974	306	5,798,068	10,236,221	16.4	790.0
1975	293	5,943,289	10,601,370	16.4	714.5
1976	290	6,357,974	11,565,138	16.4	779.3
1977	254	6,486,000	11,950,200	16.0	N.A.
1978	271	7,449,900	13,589,200	16.0	N.A.
1979	313	9,061,313	16,559,318	16.3	N.A.
1980	269	7,621,000	14,720,000	16.3	N.A.
1981	274	7,837,000	15,153,800	16.5	N.A.
1982	269	7,792,100	15,100,300	15.6	N.A.
1983	287	8,989,600	16,462,400	16.0	N.A.
1984	286	8,963,600	16,445,700	15.7	N.A.
1985	252	8,442,700	15,542,100	16.0	N.A.

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(1) Figures as of December 31; other figures as of date indicated.

Source: 1947-1973--Sun Company, Analysis of World Tank Ship Fleet.
1974-1978--Sun Shipbuilding and Dry Dock Company.
1977-1985--U.S. Department of Transportation, Maritime Administration (Report E2-17).

WORLD TANK SHIP FLEET (ACTUAL AND T2-SE-A1 EQUIVALENTS)
(Ocean-going vessels of 2,000 gross tons and over)

Year (1)	ACTUAL FLEET				T2-SE-A1
	Number	Gross Tons	Deadweight Tons	Average Speed (knots)	Equivalents
Jan. 1, 1947	1,925	15,692,962	24,278,900	12.87	1,285.1
Oct. 1, 1947	1,868	15,286,141	23,585,800	13.0	1,271.4
April 1, 1948	1,863	15,364,543	23,692,400	12.9	1,264.3
Jan. 1, 1949	1,872	15,459,372	23,815,800	12.1	1,274.4
Sept. 1, 1949	1,955	16,249,603	24,932,400	13.2	1,352.3
Sept. 1, 1950	2,056	17,567,202	26,957,200	13.3	1,469.7
April 1, 1951	2,131	18,453,538	28,255,100	13.3	1,544.1
Oct. 1, 1952	2,292	20,417,100	31,318,300	13.4	1,726.8
1953	2,502	23,473,900	35,732,300	13.6	2,003.5
1954	2,602	25,733,900	39,137,300	13.9	2,244.0
1955	2,681	27,338,600	41,623,100	14.0	2,398.1
1956	1,778	29,455,500	44,882,600	14.2	2,614.2
1957	2,954	33,046,800	50,424,800	14.4	2,988.2
1958	3,146	37,020,100	56,640,700	14.6	3,403.3
1959	3,276	40,831,500	62,657,800	14.8	3,826.1
1960	3,264	42,801,300	65,780,400	15.1	4,076.0
1961	3,250	44,701,000	68,859,400	15.2	4,304.8
1962	3,259	46,630,100	71,995,700	15.3	4,542.9
1963	3,279	49,168,600	76,179,500	15.4	4,841.3
1964	3,359	54,468,900	85,125,700	15.6	5,455.3
1965	3,436	59,158,200	93,171,900	15.7	5,984.4
1966	3,524	64,787,600	102,908,800	15.7	6,641.4
1967	3,613	69,965,500	112,366,200	15.7	7,274.6
1968	3,775	78,169,730	128,128,100	15.8	8,311.9
1969	3,893	86,821,100	146,029,100	15.8	9,461.5
1970	4,002	97,599,779	167,940,200	15.8	10,924.9
1971	4,207	111,681,295	193,891,100	15.8	12,577.0
1972	4,342	124,431,430	221,204,200	15.8	14,340.5
1973	4,572	142,413,985	256,821,730	15.8	16,634.2
1974	4,892	165,723,032	302,276,779	15.7	19,542.5
1975	5,112	188,212,834	348,586,400	15.7	22,547.7
1976	5,140	203,938,871	382,533,975	15.7	24,762.9
1977	5,013	206,348,687	390,165,427	15.7	25,249.8
1978	4,731	202,581,402	386,123,276	15.7	24,984.4
1979	4,800	205,823,484	390,206,275	15.7	25,257.7

(1) Figures as of December 31; other figures as of date indicated.

Source: Sun Company, Analysis of World Tank Ship Fleet, 1947-1973
Sun Shipbuilding and Dry Dock Company, 1974-1976
Sun Transport Inc., Analysis of World Tank Ship Fleet, 1977-1979

Section XII
Table 5

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

Year of Construction	UNITED STATES No.	UNITED STATES Dead-Weight Tons	LIBERIA No.	LIBERIA Dead-Weight Tons	UNITED KINGDOM No.	UNITED KINGDOM Dead-Weight Tons	JAPAN No.	JAPAN Dead-Weight Tons	NORWAY No.	NORWAY Dead-Weight Tons	GREECE No.	GREECE Dead-Weight Tons
Before 1955	110	2,564,988	12	263,014	6	126,106	7	128,688	1	17,281	19	271,416
1955	6	164,687	3	116,360	3	63,162	0	0	0	0	6	105,093
1956	6	185,697	4	104,954	0	0	0	0	2	41,420	14	316,685
1957	10	333,468	7	231,313	1	8,959	1	3,677	1	19,706	7	169,451
1958	13	416,145	11	449,190	6	130,866	1	44,673	1	10,679	22	488,403
1959	15	549,097	18	970,876	6	131,034	2	63,951	3	59,759	20	508,183
1960	9	364,774	12	367,787	7	161,376	0	0	1	19,713	18	550,710
1961	7	310,691	19	680,674	7	248,409	2	54,805	3	125,999	9	283,683
1962	4	225,430	12	445,814	7	258,093	4	276,350	3	63,597	12	442,080
1963	5	201,523	17	1,119,892	7	276,645	1	74,259	3	84,963	15	861,644
1964	5	196,409	43	2,705,875	11	435,930	5	360,103	1	45,975	19	1,332,118
1965	2	95,499	44	2,615,585	13	477,689	10	637,051	1	20,791	25	1,706,697
1966	1	37,884	37	3,117,685	5	228,716	9	667,449	5	317,953	17	1,243,893
1967	1	94,518	40	3,377,269	8	517,065	12	906,582	10	462,106	23	1,927,749
1968	3	113,866	33	3,654,003	16	819,392	10	901,871	12	735,795	13	1,421,729
1969	9	420,703	35	4,570,172	11	1,224,381	20	2,679,922	12	1,368,931	14	2,408,120
1970	11	568,847	56	8,529,683	18	2,315,488	13	2,004,920	17	1,889,124	16	1,948,995
1971	8	473,420	78	10,299,128	21	2,108,182	25	3,593,584	24	2,909,981	14	1,178,692
1972	7	451,733	59	9,906,735	30	2,398,922	33	5,870,899	13	1,761,310	16	1,911,302
1973	8	777,861	68	12,118,784	31	2,980,141	47	5,946,034	23	4,422,034	13	1,075,055
1974	10	851,690	97	16,281,390	31	4,778,593	37	3,512,975	27	3,437,932	9	841,709
1975	13	927,970	117	18,510,541	34	4,417,194	33	4,105,567	34	4,916,093	2	162,390
1976	12	1,170,299	77	12,085,820	15	2,363,920	38	4,441,803	34	3,846,425	10	1,541,028
1977	15	1,620,099	41	6,179,878	11	1,090,012	23	827,266	18	1,550,086	3	525,249
1978	12	1,463,646	22	1,857,941	10	1,413,655	31	428,506	11	969,707	1	32,389
1979	11	1,958,374	22	1,476,313	9	522,296	50	1,194,154	13	476,950	2	167,717
Total	313	16,559,318	984	122,036,676	324	29,496,226	414	38,725,069	273	29,574,310	339	23,422,18
Average Age	11 yrs. 3 mos.		7 yrs. 4 mos.		7 yrs. 1 mo.		7 yrs. 1 mo.		6 yrs. 3 mos.		11 yrs. 6 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

Section XII
Table 5a

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

Year of Construction	FRANCE		PANAMA		ITALY		SWEDEN		U.S.S.R.		WEST GERMANY	
	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons
Before 1955	1	18,471	17	442,559	17	253,673	0	0	12	133,791	0	0
1955	0	0	0	0	4	59,790	0	0	10	103,263	0	0
1956	0	0	4	87,646	4	64,054	0	0	13	132,941	0	0
1957	0	0	2	61,884	6	128,747	0	0	13	126,615	0	0
1958	0	0	11	298,137	8	156,843	0	0	8	50,768	0	0
1959	0	0	13	473,088	4	81,244	0	0	14	151,755	0	0
1960	3	75,215	9	272,421	5	182,911	0	0	17	319,978	0	0
1961	3	112,088	5	174,921	6	191,483	0	0	11	155,249	0	0
1962	2	9,370	7	231,931	1	38,594	1	7,291	18	306,530	1	54,142
1963	2	91,344	6	140,880	5	259,774	0	0	19	401,045	1	48,800
1964	0	0	7	471,561	2	52,898	0	0	27	814,080	0	0
1965	3	92,727	9	557,841	4	59,906	2	7,978	24	564,950	0	0
1966	2	147,164	10	637,904	4	250,153	1	121,185	28	601,009	1	65,499
1967	2	37,315	5	379,959	2	99,380	1	3,400	19	240,685	2	217,809
1968	5	544,350	20	854,949	6	354,970	0	0	16	237,086	3	421,674
1969	7	825,955	11	175,739	7	249,641	6	367,207	24	262,114	1	257,995
1970	4	702,546	1	10,408	8	823,623	3	26,604	26	275,648	2	221,713
1971	14	2,257,040	5	262,745	5	634,772	0	0	13	102,950	1	2,591
1972	7	900,340	11	1,614,325	8	1,094,876	3	518,320	14	93,342	1	5,702
1973	12	2,171,232	8	462,065	16	1,411,201	10	642,717	16	110,593	3	317,158
1974	13	2,901,466	12	1,549,355	13	1,616,840	4	504,203	5	30,769	13	2,148,098
1975	7	1,162,281	14	1,343,940	18	1,601,067	5	749,239	19	681,903	7	633,729
1976	13	2,923,019	17	1,469,025	8	1,533,420	7	1,333,566	21	546,587	10	1,522,783
1977	6	957,448	8	1,061,674	6	649,917	4	574,565	16	372,342	2	12,811
1978	0	0	3	207,587	6	922,144	1	498,995	20	730,336	1	4,000
1979	1	554,000	5	56,026	1	10,250	7	507,900	16	459,173	0	0
Total	174	12,782,171	55	5,863,170	439	8,005,502	49	5,934,504	101	9,369,627	92	5,912,705
Average Age	7 yrs. 7 mos.		4 yrs. 7 mos.		10 yrs. 8 mos.		6 yrs. 3 mos.		5 yrs. 5 mos.		6 yrs. 7 mos.	

(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

AGE DISTRIBUTION OF WORLD TANK SHIP FLEET BY MAJOR FLAG OF REGISTRY(1)
(As of December 31, 1979)

Year of Construction	SPAIN		SINGAPORE		ALL OTHERS		TOTAL	
	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons	No.	Dead-Weight Tons
Before 1955								
1955	2	16,465	4	61,085	79	1,131,569	287	5,429,086
1956	0	0	1	5,325	12	164,661	45	802,341
1957	0	0	3	53,583	11	195,110	61	1,182,090
1958	0	0	2	42,122	14	225,765	64	1,351,707
1959	3	27,650	5	115,916	17	347,729	106	2,536,999
1960	2	28,810	3	102,158	23	604,936	123	3,724,891
1961	6	88,503	1	20,264	35	944,615	123	3,368,267
1962	2	43,597	0	0	22	562,829	96	2,944,428
1963	4	89,581	2	109,421	24	675,086	102	3,233,310
1964	2	18,710	1	44,066	16	684,269	100	4,307,814
1965	2	59,713	2	8,080	30	1,287,265	171	8,191,772
1966	0	0	3	162,471	35	1,594,501	158	9,193,466
1967	3	188,450	0	0	39	1,353,498	167	9,805,785
1968	4	204,048	1	3,397	39	2,234,075	181	12,501,205
1969	6	336,175	1	75,573	35	2,310,477	199	17,533,105
1970	6	261,297	0	0	30	2,939,636	211	22,518,532
1971	4	420,764	5	244,329	22	1,871,173	239	26,359,351
1972	4	818,344	3	207,544	24	974,059	233	28,527,753
1973	6	568,871	2	188,887	54	4,306,806	317	37,499,439
1974	6	738,787	12	1,023,726	75	6,185,734	364	46,403,267
1975	7	1,033,439	21	1,768,934	74	6,525,784	405	48,540,071
1976	9	1,163,379	15	1,364,351	71	6,076,414	357	43,381,839
1977	12	2,292,617	1	96,531	50	4,813,669	216	22,624,164
1978	7	895,958	0	0	36	1,617,006	161	11,041,870
1979	4	74,469	3	161,600	28	2,312,705	172	9,931,927
TOTAL	101	9,369,627	92	5,912,705	916	52,742,876	4,800	390,206,275
Average Age	5 yrs. 5 mos.		6 yrs. 7 mos.		7 yrs. 9 mos.		7 yrs. 8 mos.	

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(1) Ocean-going vessels 2,000 gross tons and over.

Source: Sun Transport, Inc., Analysis of World Tank Ship Fleet

Section XII
Table 6

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1983
(GALLONS)

SOURCE	NO.	OIL VOLUME	NO.	HAZARDOUS VOLUME	NO.	OTHER VOLUME	NO.	TOTAL VOLUME
VESSELS								
Tank Ships	276	145,778	14	64,729	20	4,250	310	214,757
Tank Barges	561	1,798,055	17	8,717	18	69,081	596	1,875,853
Dry Cargo Barges	13	1,275	0	-	3	97	16	1,370
Dry Cargo Ships	204	102,379	0	-	9	171	13	102,550
Combatants	245	26,265	1	30	6	353	252	26,648
Other	1,131	248,348	4	145	44	797	1,179	249,290
TOTAL	2,430	2,322,098	36	73,621	100	74,749	2,566	2,470,468
LAND VEHICLES								
Rail	29	28,284	2	1,015	2	500	33	29,799
Highway	319	155,021	19	17,457	32	18,200	370	190,678
Other	129	72,463	7	33,695	8	6,326	144	112,484
TOTAL	477	255,768	28	52,167	42	25,026	547	332,961
NON-TRANSPORT, ON/OFFSHORE								
Refinery	72	35,657	10	137,627	8	1,740	90	175,024
Bulk Storage	251	292,480	7	1,960	5	5,670	263	300,110
Onshore Production	134	606,393	0	-	6	169,265	140	775,658
Offshore Production	1,184	112,491	11	164	22	568	1,217	113,223
Other	244	47,477	51	521,687	48	5,538,276	341	6,107,440
TOTAL	1,883	1,094,498	79	661,438	89	5,715,519	2,051	7,471,455
PIPELINES	166	33,963	2	2	2	0	170	33,965
MARINE FAC. ON/OFFSHORE								
Fuel Transfer	24	4,446	0	-	0	0	24	4,446
Bulk Transfer	156	78,024	7	1,672	6	116	169	79,812
Non-Bulk Transfer	3	401	0	-	0	0	3	401
Other	91	81,290	8	182	18	41,658	117	123,130
TOTAL	274	164,161	15	1,854	24	41,774	313	207,789
LAND FACILITIES	47	13,933	5	1,166	9	3,624	61	18,723
MISC/UNKNOWN	4,234	4,483,552	124	1,008,793	606	10,370,959	4,964	15,863,304
GRAND TOTAL	9,511	8,367,973	289	1,799,041	872	16,231,651	10,672	26,398,665

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1983 and 1984.

Section XII
Table 6a

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1984
(GALLONS)

SOURCE	OIL NUMBER	OIL VOLUME	HAZARDOUS NUMBER	HAZARDOUS VOLUME	OTHER NUMBER	OTHER VOLUME	TOTAL NUMBER	TOTAL VOLUME
VESSELS								
Tank Ships	244	1,906,668	9	2,837	19	20,126	272	1,929,631
Tank Barges	529	2,488,441	16	52,902	19	22,005	564	2,563,348
Dry Cargo Barges	11	2,900	0	0	0	0	11	2,900
Dry Cargo Ships	170	1,479,833	0	0	16	73	186	1,479,906
Combatants	237	173,319	2	2	8	70	247	174,391
Other	1,234	220,187	4	74	587	830	1,825	221,091
TOTAL	2,425	6,268,348	31	55,815	649	43,104	3,105	6,367,267
LAND VEHICLES								
Rail	90	82,111	28	51,692	47	5,865	165	139,668
Highway	393	269,830	28	30,622	52	33,601	473	334,053
Other	152	24,686	2	1,001	16	1,019	170	26,706
TOTAL	635	376,627	58	83,315	115	40,485	808	500,427
NON-TRANSPORT, ON/OFFSHORE								
Refinery	114	149,304	7	5,037	12	10,705	133	165,046
Bulk Storage	298	1,463,144	12	74,978	19	35,695	329	1,573,817
Onshore Production	99	24,178	2	128	5	1,198	106	25,504
Offshore Production	1,170	56,555	6	99	19	1,097	1,195	57,751
Other	717	228,506	146	313,891	154	457,726	1,017	1,000,123
TOTAL	2,398	1,921,687	173	394,133	209	506,421	2,780	2,822,241
PIPELINES	54	2,613	1	2	3	42	58	2,657
MARINE FAC. ON/OFFSHORE								
Fuel Transfer	27	14,193	0	0	0	0	27	14,193
Bulk Transfer	150	74,754	10	14,222	9	12,043	169	101,019
Non-Bulk Transfer	3	26	0	0	0	0	3	26
Other	0	0	0	0	0	0	0	0
TOTAL	180	88,973	10	14,222	9	12,043	199	115,238
LAND FACILITIES	73	31,062	8	4,450	23	34,863	104	70,375
MISC/UNKNOWN	3,480	7,565,613	35	121,694	998	113,055	4,513	8,800,362
GRAND TOTAL	9,245	16,254,923	316	673,631	2,006	750,013	11,567	17,678,567

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1984, 1985, 1986.

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1985
(GALLONS)

SOURCE	NO.	OIL VOLUME	NO.	HAZARDOUS VOLUME	NO.	OTHER VOLUME	NO.	TOTAL VOLUME
VESSELS								
Tank Ships	173	10,732,387	5	131	12	1,247	190	10,733,765
Tank Barges	417	3,688,584	19	2,986	16	4,220	452	3,695,790
Dry Cargo Barges	12	1,779	1	0	2	1	15	1,780
Dry Cargo Ships	145	177,067	4	173	16	7,033	165	184,273
Combatants	135	13,770	0	0	6	2	141	13,772
Other	1,187	514,215	3	42	842	10,021	2,032	542,278
TOTAL	2,069	15,127,802	32	3,332	894	22,524	2,995	15,153,658
LAND VEHICLES								
Rail	69	69,948	26	6,949	42	711	137	77,608
Highway	307	137,731	36	4,226	70	27,815	413	169,772
Other	108	20,777	2	17	19	5,882	129	26,676
TOTAL	484	228,456	64	11,192	131	34,408	679	274,056
NON-TRANSPORT, ON/OFFSHORE								
Refinery	88	1,325,077	8	760	19	25,141	115	1,350,978
Bulk Storage	206	380,139	16	23,231	17	12,378	239	415,748
Onshore Production	150	127,569	12	1,155,276	27	85,394	189	1,368,239
Offshore Production	831	26,922	4	530	40	599	875	28,051
Other	555	234,901	156	127,002	123	2,581,336	834	2,943,239
TOTAL	1,830	2,094,608	196	1,306,799	226	2,704,848	2,252	6,106,255
PIPELINES	65	43,047	0	0	4	203	69	43,250
MARINE FAC. ON/OFFSHORE								
Fuel Transfer	20	10,432	0	0	0	0	20	10,432
Bulk Transfer	91	26,360	18	18,794	8	7,668	117	52,822
Non-Bulk Transfer	1	0	0	0	0	0	1	0
Other	82	19,757	8	82	10	203	100	20,042
TOTAL	194	56,549	26	18,876	18	7,871	238	83,296
LAND FACILITIES	130	88,946	30	10,457	29	7,511	189	106,914
MISC/UNKNOWN	2,250	1,035,732	62	41,818	920	188,321	3,232	1,265,871
GRAND TOTAL	6,993	18,666,794	410	1,392,474	2,219	2,965,386	9,622	23,024,654

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1984, 1985, 1986.

SOURCES OF OIL SPILLS AND OTHER SUBSTANCES
1986
(GALLONS)

SOURCE	NO.	OIL VOLUME	NO.	HAZARDOUS VOLUME	NO.	OTHER VOLUME	NO.	TOTAL VOLUME
VESSELS								
Tank Ships......................	203	1,163,809	18	5,618	27	1,470	248	1,170,897
Tank Barges.....................	577	1,884,500	37	212,712	25	8,734	639	2,105,946
Dry Cargo Barges..............	13	556	1	0	3	8	17	564
Dry Cargo Ships...............	170	35,563	5	615	32	12,349	207	48,527
Combatants.....................	95	28,031	0	0	6	2,086	101	30,117
Other...........................	1,761	285,526	12	1,650	419	8,322	2,192	295,498
TOTAL.....................	2,819	3,397,985	73	220,595	512	32,969	3,404	3,651,549
LAND VEHICLES								
Rail............................	14	1,285	12	0	4	1	30	1,286
Highway.........................	216	35,772	28	3,552	24	4,098	270	43,422
Other...........................	27	297	0	0	3	0	30	297
TOTAL.....................	259	37,354	40	3,552	31	4,099	330	45,005
NON-TRANSPORT, ON/OFFSHORE								
Refinery........................	37	272,847	2	200	8	266	47	273,313
Bulk Storage....................	76	352,539	8	1,400	15	3,782	99	357,721
Onshore Production............	83	8,084	28	6,858	56	402,498	167	417,440
Offshore Production...........	260	11,735	0	0	6	16	266	11,751
Other...........................	141	9,542	35	16,485	32	102,297	208	128,324
TOTAL.....................	597	654,747	73	24,943	117	508,859	787	1,188,549
PIPELINES.......................	41	173,599	2	5	2	1	45	173,605
MARINE FAC. ON/OFFSHORE								
Fuel Transfer.................	2	2	0	0	0	0	2	2
Bulk Transfer.................	11	1,789	0	0	2	90	13	1,879
Non-Bulk Transfer............	0	0	0	0	0	0	0	0
Other...........................	305	80,497	18	25,258	19	16,052	342	121,807
TOTAL.....................	318	82,288	18	25,258	21	16,142	357	123,688
LAND FACILITIES.................	256	23,779	41	66,020	52	5,722	349	95,521
MISC/UNKNOWN....................	1,538	297,449	128	113,705	622	292,335	2,288	703,489
GRAND TOTAL..............	5,762	4,440,452	371	453,900	1,315	859,973	7,484	5,754,325

Source: U.S. Department of Transportation, Coast Guard, Polluting Incidents In and Around U.S. Waters, 1984, 1985, 1986.

Section XII
Table 7

TOTAL AND AVERAGE CONSUMPTION OF MOTOR FUEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)
1947	30,872	20,086	651	6,650	7,243	1,089	176	778	4,420
1948	33,394	21,369	640	7,379	8,189	1,110	184	780	4,239
1949(3)	36,453	22,957	630	8,028	8,666	1,079	209	711	3,402
1950(3)	40,334	25,238	626	8,604	9,526	1,107	224	782	3,491
1951(3)	42,682	26,990	632	9,001	10,188	1,132	230	836	3,635
1952(3)	43,818	28,729	656	9,207	10,844	1,178	240	890	3,708
1953(3)	46,460	30,249	654	9,576	11,418	1,192	244	937	3,840
1954	48,413	30,915	639	9,726	12,541	1,289	233	755	3,240
1955	52,092	33,548	644	10,413	13,308	1,278	255	771	3,024
1956	54,249	35,326	651	10,737	13,978	1,302	255	802	3,145
1957	56,375	36,769	652	10,961	14,271	1,302	264	825	3,125
1958	57,392	38,095	644	11,159	14,514	1,301	270	809	2,996
1959(4)	60,132	40,056	666	11,671	15,453	1,324	265	823	3,106
1960	62,258	41,169	661	11,945	15,882	1,330	272	827	3,040
1961	63,870	42,033	658	12,291	16,443	1,338	281	830	2,954
1962	66,638	43,771	657	12,809	17,089	1,334	288	837	2,906
1963	69,842	45,246	648	13,360	18,432	1,380	298	838	2,812
1964	72,969	47,567	652	14,013	19,470	1,389	305	864	2,833
1965	76,634	50,275	656	14,795	19,935	1,347	314	894	2,847
1966	80,106	53,312	666	15,517	20,415	1,316	324	896	2,765
1967	82,367	55,110	669	16,193	21,673	1,338	338	910	2,692
1968	85,793	58,524	682	16,995	23,482	1,382	352	932	2,648
1969	89,156	62,448	700	17,871	24,727	1,384	364	947	2,602
1970	92,095	65,784	714	18,748	25,600	1,365	379	944	2,491
1971	96,144	69,514	723	19,802	27,086	1,368	397	947	2,385
1972	100,658	73,463	730	21,239	30,718	1,446	407	881	2,165
1973	106,119	78,011	735	23,233	31,615	1,361	426	847	1,988
1974	109,823	74,217	676	24,630	31,226	1,268	447	858	1,919

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.
(3) Total and average consumption calculated by the American Petroleum Institute for the years 1949-1953; Bureau of Public Roads data not available
(4) Includes Alaska and Hawaii beginning in 1959.

Source: Bureau of Public Roads, "Estimated Motor-Vehicle Travel in the United States and Related Data", Federal Highway Administration
American Petroleum Institute

Section XII
Table 7a

TOTAL AND AVERAGE CONSUMPTION OF MOTOR FUEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)	Number Registered (thousands)	Motor Fuel Consumption (million gallons)	Average Consumption Per Vehicle (gallons)
1975	111,679	76,457	685	25,776	31,632	1,227	462	895	1,937
1976	115,170	78,847	685	27,779	35,890	1,292	478	964	2,015
1977	118,711	80,677	680	29,562	37,964	1,284	492	984	2,002
1978	121,717	83,775	688	31,703	40,271	1,270	500	1,021	2,041
1979	125,750	80,233	638	33,350	40,859	1,225	520	1,023	1,966
1980	127,448	73,375	603	33,637	40,150	1,194	529	1,076	2,034
1981	129,123	71,718	555	34,451	41,637	1,209	544	1,098	2,019
1982	129,500	72,848	563	35,145	39,416	1,122	559	1,120	2,003
1983	131,723	73,156	555	37,089	41,662	1,123	583	1,136	1,949
1984	133,751	71,180	532	37,394	46,353	1,240	584	1,203	2,061
1985	137,308	69,450	506	39,196	51,037	1,302	593	835	1,407
1986	140,693	71,404	508	40,069	52,911	1,320	594	869	1,463
1987	142,209	70,984	499	41,119	55,860	1,359	602	904	1,502

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.

Source: U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics," Table VM-1

Section XII
Table 8

TOTAL AND AVERAGE TRAVEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon
1947	300,440	9,732	14.95	66,203	9,955	9.14	4,251	24,153	5.46
1948	319,665	9,573	14.96	74,009	10,030	9.04	4,283	23,277	5.49
1949(3)	342,478	9,395	14.92	77,731	9,682	8.97	4,252	20,344	5.98
1950(3)	363,613	9,015	14.40	90,552	10,524	9.51	4,081	18,219	5.22
1951(3)	392,131	9,187	14.54	94,844	10,537	9.31	4,118	17,904	4.92
1952(3)	410,187	9,361	14.27	99,060	10,759	9.13	4,334	18,058	4.87
1953(3)	435,351	9,370	14.39	104,633	10,927	9.17	4,449	18,234	4.75
1954	450,605	9,308	14.57	105,844	10,833	8.44	4,408	18,918	5.84
1955	487,540	9,359	14.53	111,387	10,697	8.37	4,507	17,675	5.85
1956	507,138	9,348	14.36	116,100	10,813	8.31	4,605	18,059	5.74
1957	529,405	9,391	14.40	113,206	10,328	7.93	4,393	16,640	5.32
1958	544,873	9,494	14.30	115,470	10,348	7.96	4,310	15,963	5.33
1959(4)	572,976	9,529	14.30	123,154	10,552	7.97	4,348	16,408	5.28
1960	588,083	9,446	14.28	126,409	10,583	7.96	4,353	16,004	5.26
1961	604,557	9,465	14.38	128,582	10,461	7.82	4,396	15,644	5.30
1962	629,097	9,441	14.37	133,289	10,406	7.80	4,466	15,507	5.34
1963	645,371	9,240	14.26	155,569	11,644	8.44	4,483	15,044	5.35
1964	677,613	9,286	14.25	164,271	11,723	8.43	4,616	15,134	5.34
1965	711,594	9,286	14.15	171,436	11,587	8.60	4,782	15,229	5.35
1966	751,740	9,384	14.10	173,905	11,207	8.52	4,852	14,975	5.46
1967	774,203	9,399	14.05	182,456	11,268	8.42	4,894	14,479	5.38
1968	814,030	9,488	13.91	196,651	11,571	8.37	4,968	14,114	5.33
1969	858,858	9,633	13.75	206,680	11,565	8.36	5,037	13,838	5.32
1970	900,992	9,783	13.70	214,670	11,450	8.39	5,043	13,306	5.34
1971	954,155	9,924	13.73	227,037	11,465	8.38	5,097	12,807	5.38
1972	1,003,498	9,969	13.67	259,735	12,229	8.46	5,109	12,553	5.80
1973	1,036.455	9,767	13.29	267,147	11,499	8.45	4,960	11,643	5.86
1974	1,013,068	9,225	13.65	267,519	10,861	8.57	5,060	11,320	5.90

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(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.
(3) Total and average consumption calculated by the American Petroleum Institute for the years 1949-1953; Bureau of Public Roads data not available
(4) Includes Alaska and Hawaii beginning in 1959.

Source: Bureau of Public Roads, "Estimated Motor-Vehicle Travel in the United States and Related Data." Federal Highway Administration; after 1969 American Petroleum Institute

TOTAL AND AVERAGE TRAVEL BY U.S. MOTOR VEHICLES

	PASSENGER CARS(1)			MOTOR TRUCKS			BUSES(2)		
Year	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon	Total Vehicle Miles Traveled (millions)	Average Travel Per Vehicle (miles)	Average Miles Traveled Per Gallon
1975	1,050,472	9,406	13.74	274,454	10,648	8.68	5,148	11,140	5.75
1976	1,098,147	9,535	13.93	307,957	11,086	8.58	5,761	12,045	5.98
1977	1,141,166	9,613	14.15	329,474	11,145	8.68	5,887	11,973	5.98
1978	1,194,287	9,812	14.26	347,909	10,974	8.64	6,072	12,143	5.95
1979	1,162,528	9,245	14.49	360,500	10,810	8.82	6,105	11,732	5.97
1980	1,129,887	8,865	15.32	384,570	11,433	9.58	6,400	12,103	5.95
1981	1,124,843	8,711	15.68	425,127	12,340	10.21	6,501	11,953	5.92
1982	1,191,623	9,202	16.36	394,219	11,217	10.00	6,639	11,872	5.93
1983	1,229,697	9,335	16.81	421,126	11,335	10.11	6,724	11,536	5.92
1984	1,267,291	9,475	17.80	444,054	11,875	9.58	6,736	11,534	5.60
1985	1,269,651	9,247	18.28	499,652	12,747	9.79	4,876	8,216	5.84
1986	1,310,611	9,315	18.35	519,188	12,957	9.81	5,073	8,544	5.84
1987	1,367,046	9,613	19.26	551,955	13,423	9.88	5,326	8,846	5.89

(1) Travel by motorcycles included with passenger cars.
(2) Includes commercial, school and non-revenue buses.

Source: U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics," Table VM-1

Section XII
Table 9

U.S. CAR SALES BY MARKET-CLASS COMPARISONS

Year	Subcompact	Compact	Intermediate	Standard	Luxury	Import	Total Sales
1970	1.82	19.75	23.50	36.76	2.91	15.26	8,396,595
1971	7.42	15.79	20.84	37.07	3.66	15.22	10,234,027
1972	8.17	15.34	22.59	35.38	3.76	14.76	10,935,365
1973	10.74	16.77	23.37	29.80	3.94	15.83	11,427,478
1974	10.60	22.72	24.41	22.72	3.71	15.85	8,851,265
1975	12.26	22.92	23.85	17.94	4.74	18.29	8,627,883
1976	9.90	24.12	27.76	18.80	4.67	14.78	10,099,573
1977	8.52	21.16	26.40	20.37	5.00	18.55	11,178,554
1978	8.77	22.90	26.60	18.42	5.62	17.69	11,303,909
1979	12.86	20.89	23.79	15.14	5.47	21.85	10,641,099
1980	15.41	20.96	21.37	11.09	4.48	26.69	8,973,345
1981	17.11	20.22	20.40	10.16	4.86	27.25	8,531,531
1982	16.65	17.51	19.03	13.39	5.58	27.84	7,977,570
1983	12.65	16.75	26.17	9.97	8.50	25.96	9,177,777
1984	14.04	18.08	25.54	10.61	8.25	23.48	10,391,775
1985	13.97	17.11	26.39	8.77	8.06	25.70	11,042,658
1986	14.27	14.92	26.31	8.76	7.47	28.27	11,463,092
1987(p)	9.56	19.02	26.32	13.66	N.A.	30.76	10,226,588

(p) Preliminary
N.A. = Not Available

Source: Automotive News, Market Data Book Issues
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MILEAGE AND DELIVERIES FOR U.S. LIQUID PIPELINES

Year	Miles of Pipelines: Gathering	Trunk: Crude	Trunk: Products	Total	Deliveries (mb): Crude	Deliveries (mb): Products	Deliveries (mb): Total
1979	36,927	58,606	74,261	169,794	6,728,193	4,412,059	11,140,252
1980	35,279	59,560	74,510	169,349	6,404,640	4,194,940	10,599,580
1981	38,558	57,904	76,353	172,815	6,069,575	4,152,962	10,222,537
1982	35,580	59,567	77,402	172,549	5,967,624	4,213,086	10,180,710
1983	30,966	57,466	79,387	167,819	6,020,301	4,289,301	10,309,602
1984	36,072	56,975	80,875	173,922	5,671,448	4,552,237	10,223,685
1985	35,021	55,844	80,536	171,401	6,238,731	4,505,992	10,744,723
1986	34,209	54,153	81,652	170,014	6,286,433	4,715,889	11,082,322
1987	35,055	54,886	77,924	167,865	6,277,670	4,916,665	11,194,335

Source: The Oil and Gas Journal, Pipeline Economics issue.

MILEAGE AND COMPRESSOR STATIONS FOR U.S. NATURAL GAS PIPELINES

Year	Miles of Pipeline				Total Compressor Stations		
	Transmission	Field	Storage	Total	Transmission	Other	Total
1979	190,338	65,520	4,876	260,734	1,113	877	1,990
1980	189,648	68,641	7,252	265,541	1,127	866	1,993
1981	196,942	72,812	4,810	274,634	1,097	860	1,957
1982	204,896	76,073	6,030	286,999	1,116	995	2,111
1983	203,403	75,095	6,706	285,204	1,367	1,342	2,709
1984	187,465	66,172	4,742	258,379	1,152	898	2,050
1985	197,727	77,145	4,523	279,395	1,629	726	2,355
1986	201,662	72,934	5,274	279,870	1,537	911	2,448
1987	198,578	72,981	8,526	280,085	1,331	897	2,228

Source: The Oil and Gas Journal, Pipeline Economics issue.

BASIC PETROLEUM DATA BOOK

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ESTIMATED PROVED WORLD RESERVES OF NATURAL GAS ANNUALLY AS OF JANUARY 1
(Trillions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist(1) Nations	Total World
1967	289.3	45.0	64.6	398.9	215.1	158.2	32.5	87.7	892.4	150.9	1,043.3
1968	292.9	48.0	67.1	408.0	220.2	167.2	40.1	131.0	966.5	219.0	1,185.5
1969	287.3	46.5	62.9	396.7	223.6	168.3	52.7	138.4	979.7	346.0	1,325.7
1970	275.1	50.7	163.2	489.0	235.1	198.1	67.5	147.5	1,137.8	353.5	1,491.3
1971	290.7(1)	60.5	73.1	424.3	354.1	191.5	56.3	146.7	1,172.9	441.2	1,614.1
1972	278.8(1)	54.4	72.7	405.9	343.8	193.0	69.8	161.6	1,174.1	559.8	1,733.9
1973	266.1(1)	55.0	79.2	400.3	344.0	189.0	101.2	176.6	1,211.1	666.4	1,877.5
1974	250.0(1)	50.3	91.3	391.6	413.1	187.7	114.2	192.2	1,298.8	737.2	2,036.0
1975	237.1(1)	52.5	100.2	389.8	672.4	315.0	115.9	201.1	1,694.2	848.0	2,542.2
1976	228.2(1)	53.4	90.5	372.1	538.1	207.2	111.6	179.9	1,408.9	836.5	2,245.4
1977	216.0(1)	56.0	90.3	362.3	535.9	209.1	120.0	140.9	1,368.2	954.5	2,322.7
1978	208.9(1)	58.0	108.5	375.4	719.1	207.5	122.7	137.3	1,562.0	956.4	2,518.4
1979	200.3(1)	59.0	113.0	372.3	730.2	186.3	119.9	142.4	1,551.1	946.3	2,497.4
1980	194.9(1)	85.5	144.5	424.9	739.8	210.4	128.8	134.9	1,638.8	936.0	2,574.8
1981	199.0(1)	87.3	149.0	435.3	751.9	208.5	126.3	158.3	1,680.3	955.4	2,635.7
1982	201.7(1)	89.9	176.3	467.9	761.9	211.7	127.6	151.2	1,720.3	1,194.7	2,915.0
1983	201.5(1)	97.0	186.6	485.1	769.2	189.4	146.2	157.3	1,747.2	1,283.8	3,031.0
1984	200.2(1)	90.5	186.4	477.1	774.0	189.6	156.2	158.3	1,755.2	1,446.8	3,202.0
1985	197.5(1)	92.3	184.9	474.7	869.4	187.2	166.2	206.7	1,904.2	1,497.4	3,401.6
1986	193.4(1)	99.7	189.3	482.3	855.9	198.3	171.5	226.4	1,934.4	1,546.0	3,480.4
1987	191.6(1)	99.6	190.1	475.1	925.3	201.4	198.6	229.7	2,036.4	1,595.8	3,632.2
1988	187.2(1)	98.0	226.7	511.4	1,084.0	248.6	224.8	218.2	2,287.5	1,510.0	3,797.5
1989	187.2(1)	95.1	236.1	518.4	1,182.1	253.3	240.7	200.1	2,394.6	2,560.7	3,955.3

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(1) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska (discovered in 1968) for which transportation facilities are not yet available.

Source: 1967-1980: United States-American Gas Association, Committee on Natural Gas Reserves
1981-1988: United States-Department of Energy
Rest of the World-The Oil & Gas Journal, "Worldwide Report" issues
1989: The Oil and Gas Journal, "Worldwide Report" issue.

Section XIII
Table 2

THE SUPPLY OF UNITED STATES NATURAL GAS
(Millions of cubic feet - 14.72 psia at 60 F.)

Year	Proved Reserves at Start of Year	Reserve Revisions, Extensions and Discoveries During Year	Net Change in Underground Storage(4)	Production During Year(1)	Proved Reserves at Year-end
1947	160,575,901	10,980,824	N.A.	5,629,811	165,926,914
1948	165,926,914	13,898,572	51,482	6,007,628	173,869,340
1949	173,869,340	12,674,299	82,746	6,245,041	180,381,344(5)
1950	179,401,693(5)	11,984,290	54,006	6,855,244	184,584,745
1951	184,584,745	15,965,808	132,030	7,923,673	192,758,910
1952	192,758,910	14,267,606	197,766	8,592,716	198,631,566
1953	198,631,566	20,008,051	513,629(2)	9,188,365	210,298,763
1954	210,298,763	9,547,074	90,408	9,375,314	210,560,931
1955	210,560,931	21,897,616	87,164	10,063,167	222,482,544
1956	222,482,544	24,716,115	133,241	10,848,685	236,483,215
1957	236,483,215	20,008,051	178,761	11,439,890	245,230,137
1958	245,230,137	18,896,724	57,582	11,422,651	252,761,792
1959	252,761,792	20,621,249	160,453	12,373,036	261,170,431
1960	261,170,431	13,893,978	281,272	13,019,356	262,326,326
1961	262,326,326	17,166,421	159,544	13,378,649	266,273,642
1962	266,273,642	19,483,958	159,231	13,637,973	272,278,858
1963	272,278,858*	18,164,667	253,733	14,546,025	276,151,233
1964	276,151,233	20,252,139	195,110	15,347,028	281,251,454
1965	281,251,454	21,319,279	150,483	16,252,293	286,468,923
1966	286,468,923	20,220,432	134,523	17,491,073	289,332,805
1967	289,332,805	21,804,333	151,403	18,380,838	292,907,703
1968	292,907,703	13,697,008	118,569	19,373,428	287,349,852
1969	287,349,852	8,375,004	107,169	20,723,190	275,108,835
1970	275,108,835	37,196,359(3)	402,018	21,960,804	290,746,408(3)
1971	290,746,408(3)	9,825,421	310,301	22,076,512	278,805,618(3)
1972	278,805,618(3)	9,634,563	156,563	22,511,898	266,084,846(3)
1973	266,084,846(3)	6,825,049	-354,282	22,605,406	249,950,207(3)
1974	249,950,207(3)	8,679,184	-178,424	21,318,470	237,132,497(3)

N.A. Not Available
(1) Estimated.
(2) All native gas in storage reservoirs formerly classified as proved reserves of natural gas is included in this figure.
* Excludes gas loss due to natural gas liquids recovery.
(3) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska, (discovered in 1968).
(4) The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories. (Adjustments include change of reporting basis starting in 1973 to report only gas reserves considered recoverable, in effect, reducing gas reserves by 1,024,140 MMCF that would have been reported since 1972 using former basis).
(5) Natural gas reserves have been revised back to 1950. Because of this, proved reserves at year-end 1949 and proved reserves at start of year 1950 are not the same.

Source: American Gas Association, Committee on Natural Gas reserves, GAS FACTS

THE SUPPLY OF UNITED STATES NATURAL GAS
(Millions of cubic feet - 14.72 psia at 60 F.)

Year	Proved Reserves at Start of Year(3)	Reserve Revisions, Extensions and Discoveries During Year	Net Change in Underground Storage(4)	Production During Year(1)	Proved Reserves at Year-end(3)
1975	237,132,497	10,483,688	302,561	19,718,570	228,200,176
1976	228,200,176	7,555,468	-187,550	19,542,020	216,026,047
1977	216,026,047	11,851,924	446,930	19,447,050	208,877,878
1978	208,877,878	10,586,144	148,733	19,311,048	200,301,707
1979	200,301,707	14,285,947	239,323	19,910,353	194,916,624
1980(5)	200,997,000	16,723,000	N.A.	18,699,000	199,021,000
1981	199,021,000	21,446,000	N.A.	18,737,000	201,730,000
1982	201,730,000	17,288,000	N.A.	17,506,000	201,512,000
1983	201,512,000	14,523,000	N.A.	15,788,000	200,247,000
1984	200,247,000	14,409,000	N.A.	17,193,000	197,463,000
1985	197,463,000	11,891,000	N.A.	15,985,000	193,369,000
1986	193,369,000	13,827,000	N.A.	15,610,000	191,586,000
1987	191,586,000	11,739,000	N.A.	16,114,000	187,211,000

N.A. Not Available
(1) Estimated.
(3) Figures include 26 trillion cubic feet in Prudhoe Bay, Alaska.
(4) The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories. (Adjustments include change of reporting basis starting in 1973 to report only gas reserves considered recoverable, in effect, reducing gas reserves by 1,024,140 MMCF that would have been reported since 1972 using former basis).
(5) Beginning in 1980, the data used are from the Department of Energy. Because of different methodology, the reserves at start of year (from DOE) differ from reserves at year-end 1979 (from AGA).

Source: 1975-1979--American Gas Association, Committee on Natural Gas Reserves, GAS FACTS.
1980-1987--U.S. Department of Energy, Energy Information Administration, US Crude and Natural Gas and NGL Reserves.

THE RESERVES OF U.S. NATURAL GAS LIQUIDS
(Thousands of Barrels)

Year	Proved Reserves at Start of Year	Reserve Revisions Extensions & Discoveries	Production	Proved Reserves at Year-end	Indicated Years Supply at Year-end
1947	3,163,219	251,538	160,782	3,253,975	20.2
1948	3,253,975	470,557	183,749	3,540,783	19.3
1949	3,540,783	386,776	198,547	3,729,012	18.8
1950	3,729,012	766,062	227,411	4,267,663	18.8
1951	4,267,663	723,991	267,052	4,724,602	17.7
1952	4,724,602	556,838	284,789	4,996,651	17.5
1953	4,996,651	743,969	302,698	5,437,922	18.0
1954	5,437,922	107,350	300,815	5,244,457	17.4
1955	5,244,457	514,508	320,400	5,438,565	17.0
1956	5,438,565	809,820	346,053	5,902,332	17.1
1957	5,902,332	137,392	352,364	5,687,360	16.1
1958	5,687,360	858,206	341,548	6,204,018	18.2
1959	6,204,018	703,444	385,154	6,522,308	16.9
1960	6,522,308	725,130	431,379	6,816,059	15.8
1961	6,816,059	694,686	461,649	7,049,096	15.3
1962	7,049,096	732,549	470,128	7,311,517	15.6
1963	7,311,517	878,120	515,659	7,673,978	14.9
1964	7,673,978	608,744	536,090	7,746,632	14.4
1965	7,746,632	832,312	555,410	8,023,534	14.4
1966	8,023,534	894,116	588,684	8,328,966	14.1
1967	8,328,966	929,758	644,493	8,614,231	13.4
1968	8,614,231	685,659	701,782	8,598,108	12.2
1969	8,598,108	281,028	735,962	8,143,174	11.1
1970	8,143,174	307,579	747,812	7,702,941	10.3
1971	7,702,941	347,720	746,434	7,304,227	9.8
1972	7,304,227	238,273	755,941	6,786,559	9.0
1973	6,786,559	408,979	740,831	6,454,707	8.7
1974	6,454,707	619,841	724,099	6,350,449	8.8
1975	6,350,449	618,504	701,123	6,267,830	8.9
1976	6,267,830	834,766	700,629	6,401,967	9.1
1977	6,401,967	291,171	698,773	5,994,365	8.6
1978	5,994,365	595,666	664,179	5,925,852	8.9
1979(1)	6,772,000	570,000	727,000	6,615,000	9.1
1980	6,615,000	844,000	731,000	6,728,000	9.1
1981	6,728,000	1,081,000	741,000	7,068,000	9.3
1982	7,068,000	874,000	721,000	7,221,000	9.9
1983	7,221,000	1,405,000	725,000	7,901,000	10.9
1984	7,901,000	518,000	776,000	7,643,000	9.8

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(1)Figures beginning with 1979 are from the Department of Energy data, using a different methodology from prior data. Therefore, year-end 1978 and start of year 1979 data are not the same.

Source: American Gas Association through 1978.
Department of Energy beginning in 1979.

Section XIII
Table 3a

THE RESERVES OF U.S. NATURAL GAS LIQUIDS
(Thousands of Barrels)

Year	Proved Reserves at Start of Year	Reserve Revisions Extensions & Discoveries	Production	Proved Reserves at Year-End	Indicated Years Supply at Year-End
1985	7,643,000	1,054,000	753,000	7,944,000	10.5
1986	7,944,000	959,000	738,000	8,165,000	11.1
1987	8,165,000	729,000	747,000	8,147,000	10.9

Source: DOE/EIA--U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual.

WORLD MARKETED PRODUCTION OF NATURAL GAS BY AREA
(Billions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1950	6,282.1	71.7	260.0	6,613.8	0	0	55.4	33.2	6,702.4	N.A.	6,702.4
1951	7,457.4	84.0	201.4	7,742.7	0	0	72.7	52.0	7,867.4	255.3	8,122.7
1952	8,013.5	93.7	223.5	8,330.7	0	0	85.2	61.9	8,477.8	305.4	8,783.2
1953	8,396.9	106.7	255.0	8,758.7	0	.1	99.6	100.4	8,958.8	503.6	9,462.4
1954	8,742.5	127.6	273.1	9,143.3	0	.3	106.3	131.3	9,381.1	538.3	9,919.4
1955	9,405.4	150.8	356.2	9,912.3	0	.5	82.3	189.8	10,184.9	524.9	10,709.8
1956	10,081.9	169.2	368.2	10,619.2	15.6	.5	101.8	227.5	10,964.6	656.9	11,621.5
1957	10,680.3	220.0	458.6	11,358.9	25.6	.4	114.2	251.8	11,750.9	926.2	12,677.0
1958	11,030.3	337.8	616.1	11,984.2	26.3	4.4	119.7	267.5	12,402.1	1,379.7	13,781.7
1959	12,046.1	417.3	714.0	13,177.4	44.5	14.4	133.3	346.9	13,716.6	1,688.0	15,404.6
1960	12,771.0	523.0	775.9	14,069.9	57.3	5.8	157.8	433.8	14,724.7	2,191.9	16,916.6
1961	13,254.0	655.7	864.1	14,773.8	172.1	20.4	170.7	502.2	15,639.2	2,748.4	18,387.6
1962	13,876.6	946.7	956.4	15,779.8	173.3	31.3	193.7	548.4	16,726.4	3,366.0	20,092.4
1963	14,666.6	1,111.5	702.5	16,480.5	149.2	16.0	135.2	560.0	17,340.8	3,678.2	21,018.9
1964	15,462.1	1,327.7	721.6	17,511.4	162.6	33.2	155.3	608.9	18,471.4	4,397.1	22,868.5
1965	16,039.8	1,442.4	779.9	18,262.2	171.2	67.9	168.3	671.1	19,340.6	5,139.6	24,480.2
1966	17,206.6	1,341.8	828.8	19,377.2	193.1	82.1	198.3	789.9	20,640.7	5,735.5	26,394.2
1967	18,171.3	1,471.7	883.5	20,526.5	229.3	85.0	215.3	1,018.6	22,074.8	6,323.0	28,397.8
1968	19,322.4	1,692.3	1,061.6	22,076.3	388.2	96.5	330.3	1,439.1	24,330.3	7,072.9	31,403.1
1969	20,698.2	1,977.8	1,143.3	23,819.4	441.7	113.8	431.1	2,009.7	26,815.7	7,569.4	34,385.1
1970	21,920.6	2,277.1	1,276.6	25,474.4	454.1	122.2	525.3	2,789.0	29,365.0	8,728.9	38,094.0
1971	22,493.0	2,499.0	1,362.6	26,354.7	698.0	522.6	559.8	3,580.7	31,715.8	9,472.6	41,188.4
1972	22,531.7	2,913.5	1,456.6	26,901.8	905.6	471.8	606.0	4,501.1	33,386.4	10,127.5	43,513.9
1973	22,647.5	3,119.5	1,615.8	27,382.8	1,276.9	585.8	775.9	5,148.0	35,169.4	10,958.4	46,127.8
1974	21,600.5	3,045.5	1,659.1	26,305.1	1,423.4	607.7	880.9	5,837.0	35,054.2	12,117.3	47,171.5

N.A. Not Available

Source: 1950-1967: U.S. Bureau of Mines, Minerals Yearbook, Annual
1968-1974: U.S. Bureau of Mines, World Natural Gas

WORLD MARKETED PRODUCTION OF NATURAL GAS BY AREA
(Billions of Cubic Feet)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1975	20,108.7	3,075.7	1,735.1	24,919.4	1,436.2	670.4	938.4	5,966.7	33,931.1	13,276.3	47,207.3
1976	19,952.4	3,067.4	1,722.1	24,741.9	1,492.8	905.8	1,173.9	6,343.6	34,657.9	14,801.3	49,459.2
1977	20,025.5	3,230.7	1,865.7	25,121.9	1,507.0	919.5	1,329.0	6,502.5	35,379.8	14,720.3	50,100.1
1978	19,974.0	3,128.1	2,012.9	25,115.0	1,579.5	1,117.4	1,469.2	6,649.9	35,930.9	15,818.4	51,749.3
1979	20,471.3	3,646.5	2,610.0	26,727.8	1,624.7	1,027.9	1,827.9	6,866.8	38,075.1	19,591.4	57,666.5
1980	20,179.7	2,668.3	3,297.5	26,344.6	1,221.3	884.7	2,558.4	6,668.7	37,677.7	21,069.9	58,747.6
1981	19,955.8	2,623.0	3,227.0	26,027.7	1,542.0	1,947.0	2,765.0	6,906.0	39,187.7	19,210.0	58,397.7
1982	18,519.7	2,546.1	3,071.5	24,137.3	1,799.7	1,168.9	2,176.6	6,142.1	35,424.6	20,258.0	55,682.6
1983	16,822.1	2,414.1	3,340.5	22,576.7	1,633.0	1,143.8	2,187.7	6,383.4	33,924.6	21,383.0	55,307.6
1984	18,229.6	2,651.8	3,451.8	24,333.2	1,533.4	1,629.1	2,530.7	6,795.4	36,821.8	23,272.1	60,093.9
1985	17,198.0	3,196.3	3,445.3	23,849.6	1,668.3	1,720.7	2,924.5	6,827.2	36,990.3	25,453.4	62,443.7
1986	16,791.0	3,168.3	3,413.6	23,372.9	1,822.8	1,661.8	3,320.9	6,519.6	36,698.0	27,088.2	63,786.2
1987	17,150.0	3,472.7	3,354.5	23,977.2	2,624.1	2,025.7	3,797.6	7,043.9	39,468.5	28,742.5	68,211.0

Source: 1975-1978: U.S. Energy Information Administration, World Natural Gas, Annuals
1979-1987: U.S. Energy Information Administration, United States only; Rest of World, Oil and Gas Journal

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Table 5

SALIENT STATISTICS OF NATURAL GAS IN THE U.S.
(Millions of Cubic Feet)

Year	Marketed Production	Exports	Consumption	Imports	Wellhead Value (m $)	Total Withdrawn from Storage	Stored	Lost in Transmission	Vented and Flared
1947	4,582,173	18,149	4,426,544	-	$274,709	86,643	96,316	127,807	1,067,938
1948	5,148,020	18,704	4,945,149	-	333,173	79,035	136,406	126,796	810,178
1949	5,419,736	20,054	5,195,484	-	344,034	106,368	172,051	138,515	853,884
1950	6,282,060	25,727	6,026,404	-	408,521	175,260	229,752	175,437	801,044
1951	7,457,359	24,163	7,102,562	-	542,964	209,428	347,690	192,372	793,186
1952	8,013,457	27,456	7,613,478	7,807	623,649	221,909	398,593	203,646	848,608
1953	8,396,916	28,322	7,979,338	9,225	774,966	246,802	404,838	240,445	810,276
1954	8,742,546	28,726	8,402,852	6,847	882,501	330,177	432,283	215,709	723,567
1955	9,405,351	31,029	9,070,343	10,888	978,357	437,251	505,185	246,933	773,639
1956	10,081,923	35,963	9,706,878	10,380	1,083,812	452,762	589,232	212,992	727,004
1957	10,680,258	41,655	10,279,775	37,941	1,201,759	480,981	672,377	205,373	809,148
1958	11,030,298	38,719	10,760,698	135,797	1,317,492	621,091	704,172	283,597	633,412
1959	12,046,115	18,413	11,819,638	133,990	1,556,800	668,743	787,485	223,312	571,048
1960	12,771,038	11,332	12,509,427	155,646	1,789,970	712,658	844,352	274,231	562,877
1961	13,182,029	10,689	13,010,654	217,671	1,996,241	694,258	839,083	233,532	523,533
1962	13,801,244	15,728	13,814,678	399,353	2,145,301	849,695	935,712	284,174	425,629
1963	14,666,559	16,865	14,560,953	430,997	2,328,030	911,741	1,041,802	362,677	383,408
1964	15,462,143	19,497	15,451,979	440,918	2,387,689	880,498	1,099,302	302,781	339,996
1965	16,039,753	26,132	16,033,189	456,394	2,494,542	959,865	1,077,980	318,711	319,143
1966	17,206,628	14,639	17,191,711	479,780	2,702,759	1,141,614	1,210,469	401,203	374,695
1967	18,171,325	81,614	18,172,894	564,226	2,898,741	1,132,534	1,317,363	296,214	489,877
1968	19,322,400	93,745	19,459,939	651,885	3,168,688	1,329,536	1,425,075	325,062	516,508
1969	20,698,240	51,304	20,922,800	726,951	3,455,615	1,379,488	1,498,988	331,587	525,750

Source: U.S. Bureau of Mines, Natural Gas Annuals

SALIENT STATISTICS OF NATURAL GAS IN THE U.S.
(Millions of Cubic Feet)

Year	Marketed Production	Exports	Consumption	Imports	Total Wellhead Value (m $)	Withdrawn from Storage	Stored	Lost in Transmission	Vented and Flared
1970	21,920,642	69,813	22,045,799	820,780	$3,745,680	1,458,607	1,856,767	227,650	489,460
1971	22,493,012	80,212	22,676,581	934,548	4,085,482	1,507,630	1,839,398	338,999	284,561
1972	22,531,698	78,013	23,009,445	1,019,496	4,180,462	1,757,218	1,892,952	328,002	248,119
1973	22,647,549	77,169	22,965,914	1,032,901	4,894,072	1,532,820	1,974,324	195,863	248,292
1974	21,600,522	76,789	22,110,623	959,284	6,573,402	1,700,546	1,784,209	288,731	169,381
1975	20,108,661	72,675	20,409,875	953,008	8,945,062	1,759,565	2,103,619	235,065	133,913
1976	19,952,438	64,711	20,800,582	963,768	11,571,776	1,921,017	1,755,690	216,240	131,930
1977	20,025,463	55,626	19,520,581	1,011,001	15,833,719	1,749,884	2,306,515	41,063	136,807
1978	19,974,033	52,532	19,627,478	965,545	18,084,914	2,157,765	2,278,002	287,201	153,350
1979	20,471,260	55,673	20,240,761	1,253,383	24,113,634	2,047,000	2,295,034	372,330	167,019
1980	20,179,724	48,731	19,877,293	984,767	32,043,704	1,909,902	1,896,284	639,559	125,451
1981	19,955,823	59,372	19,403,858	903,949	39,551,253	1,886,940	2,179,683	500,501	98,017
1982	18,519,675	51,728	18,001,055	933,336	45,496,765	2,093,644	2,399,355	474,731	93,365
1983	16,822,144	54,638	16,834,914	919,752	43,614,369	2,142,027	1,700,426	642,059	94,962
1984	18,229,638	54,753	17,950,528	843,060	48,404,611	2,064,292	2,252,347	142,607	107,913
1985	17,197,999	57,095	17,280,943	949,372	43,182,598	2,359,405	2,127,932	354,065	94,778
1986	16,790,910	61,271	16,221,296	750,130	32,607,825	1,811,697	1,952,103	426,726	97,633
1987	17,348,537	54,020	17,136,938	992,104	28,888,630	1,880,951	1,887,110	432,893	123,707

(1) Also includes changes in above ground storage and gas unaccounted for.

Source: U.S. Energy Information Administration, Natural Gas Annuals

U.S. IMPORTS OF NATURAL GAS BY SOURCE
(Billions of Cubic Feet)

Year	Canada	Mexico	Algeria(3)	Total Imports	U.S. Natural Gas Consumption
1968	604	47	NA	652	19,460
1969	680	47	NA	727	20,923
1970	779(1)	41	(2)	821	22,046
1971	911(1)	21	1	935	22,677
1972	1,009(1)	8	2	1,019	23,101
1973	1,027(1)	2	3	1,033	22,049
1974	959	(2)	0	959	22,231
1975	948	0	5	953	19,535
1976	954	0	10	964	19,946
1977	997	2	11	1,011	19,521
1978	881	0	84	966	19,627
1979	1,001	0	253	1,253	20,241
1980	797	102	86	985	19,877
1981	762(1)	105	37	904	19,404
1982	783	95	55	933	18,001
1983	712	75	131	918	16,835
1984	755	52	36	843	17,951
1985	926	0	24	950	17,281
1986	748	0	0	749(4)	16,221
1987	1,007	0	0	1,007	17,137

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(1) Includes approximately 1 billion cubic feet of liquefied natural gas in 1970, 2 billion cubic feet in 1971, 0.2 billion cubic feet in 1972, 0.7 billion cubic feet in 1973, and 0.6 billion cubic feet in 1981.
(2) Less than one-half unit.
(3) Liquefied natural gas.
(4) Includes a small amount from Indonesia.

Source: U.S. Energy Information Administration, 1968-1977: World Natural Gas Annuals
1978-1981: U.S. Imports and Exports of Natural Gas
1982-1987: Natural Gas Monthly, May issue

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Table 7

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1975		Nation	1976
1.	U.S.S.R.	810,000	1.	U.S.S.R	800,000
2.	Iran	330,000	2.	Iran	329,500
3.	United States	237,132	3.	United States	228,200
4.	Algeria	229,000	4.	Algeria	126,000
5.	United Arab Emirates(1)	200,000	5.	Saudi Arabia	103,000
6.	Netherlands	94,800	6.	Netherlands	70,000
7.	Canada	56,708	7.	Canada	56,975
8.	Saudi Arabia	55,000	8.	United Kingdom	50,000
9.	United Kingdom	50,000	9.	Nigeria	44,300
10.	Nigeria	45,500	10.	Venezuela	42,000
11.	Venezuela	43,000	11.	Australia	32,500
12.	Australia	38,000	12.	Kuwait	31,800
13.	Kuwait	32,000	13.	Libya	26,300
14.	Iraq	27,500	14.	Norway	25,000
15.	Libya	26,500	15.	People's Republic of China	25,000
16.	People's Republic of China	25,000	16.	United Arab Emirates(1)	20,000
17.	Norway	24,700	17.	Pakistan	16,400
18.	Brunei-Malaysia	22,000	18.	Indonesia	15,000
19.	Indonesia	15,000	19.	Malaysia	15,000
20.	Mexico	15,000	20.	Bolivia	10,800
	Total Free World	1,700,404		Total Free World	1,413,897
	Total World	2,546,404		Total World	2,248,897

(1) Prior to 1972 figures reflect Abu Dhabi only. Beginning 1972 they reflect Abu Dhabi, Dubai and Sharjah which formed the United Arab Emirates.

Source: United States, American Gas Association, Committee on Natural Gas Reserves
Canada, Canadian Petroleum Association
Rest of the World, The Oil & Gas Journal, "World-Wide Oil" Issues

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Table 7a

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1977		Nation	1978
1.	U.S.S.R.	918,000	1.	U.S.S.R	920,000
2.	Iran	330,000	2.	Iran	500,000
3.	United States	216,026	3.	United States	208,878
4.	Algeria	125,800	4.	Algeria	125,000
5.	Saudi Arabia	86,000	5.	Saudi Arabia	85,000
6.	Netherlands	61,900	6.	Netherlands	60,000
7.	Canada	58,282	7.	Canada	58,000
8.	Nigeria	44,000	8.	Nigeria	43,000
9.	Venezuela	40,700	9.	Venezuela	41,000
10.	Australia	32,300	10.	Qatar	40,000
11.	Kuwait	31,700	11.	Australia	32,000
12.	United Kingdom	30,000	12.	Kuwait	31,500
13.	Qatar	27,500	13.	Mexico	30,000
14.	Iraq	27,000	14.	United Kingdom	29,000
15.	Libya	25,800	15.	Iraq	28,000
16.	People's Republic of China	25,000	16.	Libya	25,700
17.	Indonesia	24,000	17.	People's Republic of China	25,000
18.	Norway	18,500	18.	Indonesia	24,000
19.	Pakistan	15,820	19.	United Arab Emirates	20,000
20.	Malaysia	15,000	20.	Norway	20,000
	Total Free World	1,161,905		Total Free World	1,563,437
	Total World	2,114,905		Total World	2,518,437

Source: United States, American Gas Association, Committee on Natural Gas Reserves
Canada, Canadian Petroleum Association
Rest of the World, The Oil & Gas Journal, "World-Wide Oil" Issues

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

Nation	1979	Nation	1980
1. U.S.S.R.	910,000	1. U.S.S.R.	900,000
2. Iran	500,000	2. Iran	490,000
3. United States	200,302	3. United States	194,917
4. Algeria	105,000	4. Algeria	132,000
5. Saudi Arabia	93,900	5. Saudi Arabia	93,230
6. Netherlands	62,000	6. Canada	85,500
7. Canada	59,000	7. Qatar	60,000
8. Nigeria	42,000	8. Netherlands	59,500
9. Venezuela	41,000	9. Mexico	59,000
10. Qatar	40,000	10. Venezuela	42,800
11. Mexico	32,000	11. Nigeria	41,400
12. Kuwait	31,300	12. Kuwait	31,000
13. Australia	31,000	13. Australia	31,000
14. Iraq	27,800	14. Iraq	27,500
15. United Kingdom	27,000	15. United Kingdom	25,000
16. People's Republic of China	25,000	16. People's Republic of China	25,000
17. Libya	24,200	17. Libya	24,000
18. Indonesia	24,000	18. Indonesia	24,000
19. Norway	24,000	19. Norway	23,500
20. United Arab Emirates	21,600	20. United Arab Emirates	20,500
Total Free World	1,552,312	Total Free World	1,639,158
Total World	2,497,312	Total World	2,574,158

Source: United States, American Gas Association
Rest of World, Oil and Gas Journal

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Table 7c

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1981		Nation	1982		Nation	1983
1.	U.S.S.R.	920,000	1.	U.S.S.R.	1,160,000	1.	U.S.S.R.	1,240,000
2.	Iran	485,000	2.	Iran	484,000	2.	Iran	482,600
3.	United States	199,021	3.	United States	201,730	3.	United States	201,512
4.	Algeria	131,500	4.	Algeria	130,900	4.	Saudi Arabia	117,000
5.	Saudi Arabia	110,000	5.	Saudi Arabia	114,000	5.	Algeria	111,250
6.	Canada	87,300	6.	Canada	89,900	6.	Canada	97,000
7.	Mexico	64,500	7.	Mexico	75,350	7.	Mexico	75,850
8.	Netherlands	62,000	8.	Qatar	60,000	8.	Qatar	62,000
9.	Qatar	60,000	9.	Netherlands	55,700	9.	Norway	58,000
10.	Norway	42,700	10.	Norway	49,370	10.	Venezuela	54,079
11.	Venezuela	42,000	11.	Venezuela	47,000	11.	Netherlands	51,920
12.	Nigeria	41,000	12.	Nigeria	40,500	12.	Malaysia	34,000
13.	Kuwait	30,800	13.	Kuwait	30,500	13.	Nigeria	32,400
14.	Australia	30,000	14.	Indonesia	27,400	14.	Kuwait	29,900
15.	Iraq	27,450	15.	Iraq	27,300	15.	Indonesia	29,600
16.	United Kingdom	24,800	16.	United Kingdom	26,000	16.	Iraq	28,800
17.	People's Republic of China	24,500	17.	People's Republic of China	24,400	17.	United Kingdon	25,400
18.	Libya	23,800	18.	Argentina	23,400	18.	Argentina	25,200
19.	Indonesia	23,500	19.	Libya	23,200	19.	Libya	21,500
20.	Argentina	22,000	20.	Abu Dhabi	19,500	20.	Abu Dhabi	19,260
	Total Free World	1,692,622		Total Free World	1,720,376		Total Free World	1,747,239
	Total World	2,646,522		Total World	2,915,076		Total World	3,031,039

Source: 1981-1983: United States, Department of Energy
Rest of World, Oil and Gas Journal

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS•
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1984		Nation	1985		Nation	1986
1.	U.S.S.R.	1,400,000	1.	U.S.S.R.	1,450,000	1.	U.S.S.R.	1,500,000
2.	Iran	480,000	2.	Iran	478,600	2.	Iran	470,000
3.	United States	200,247	3.	United States	197,463	3.	United States	193,369
4.	Saudi Arabia	121,000	4.	Qatar	150,000	4.	Qatar	148,000
5.	Algeria	110,180	5.	Saudi Arabia	123,270	5.	Saudi Arabia	121,000
6.	Canada	90,500	6.	Algeria	109,100	6.	Algeria	107,080
7.	Mexico	75,352	7.	Canada	92,300	7.	Norway	104,000
8.	Qatar	62,000	8.	Norway	89,000	8.	Canada	99,700
9.	Norway	58,800	9.	Mexico	77,000	9.	Mexico	76,954
10.	Venezuela	54,546	10.	Netherlands	68,482	10.	Netherlands	67,070
11.	Netherlands	50,050	11.	Venezuela	55,367	11.	Venezuela	59,067
12.	Malaysia	48,000	12.	Malaysia	50,000	12.	Malaysia	52,700
13.	Nigeria	34,800	13.	Indonesia	40,000	13.	Nigeria	47,000
14.	Kuwait	31,000	14.	Nigeria	35,600	14.	Indonesia	35,600
15.	China	30,300	15.	Kuwait	32,500	15.	United Kingdom	33,000
16.	Indonesia	30,200	16.	China	30,900	16.	Kuwait	32,500
17.	Iraq	29,000	17.	Iraq	28,800	17.	China	30,000
18.	United Kingdom	25,100	18.	United Kingdom	27,800	18.	Iraq	29,000
19.	Argentina	24,420	19.	Argentina	24,628	19.	Argentina	23,588
20.	Libya	21,350	20.	Libya	21,200	20.	Libya	21,390
	TOTAL FREE WORLD	1,755,397		TOTAL FREE WORLD	1,904,088		TOTAL FREE WORLD	1,934,429
	TOTAL WORLD	3,202,197		TOTAL WORLD	3,401,488		TOTAL WORLD	3,480,429

Source: 1984-1986: United States, U.S. Department of Energy
Rest of World, Oil and Gas Journal, "Worldwide Report" issue

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Table 7e

ESTIMATED NATURAL GAS RESERVES-TWENTY LEADING NATIONS
(AS OF JANUARY 1)
(Billions of Cubic Feet)

	Nation	1987		Nation	1988		Nation	1989
1.	U.S.S.R.	1,550,000	1.	U.S.S.R.	1,450,000	1.	U.S.S.R.	1,500,000
2.	Iran	450,000	2.	Iran	489,400	2.	Iran	494,400
3.	United States	191,586	3.	United States	187,200	3.	United States	187,200
4.	Qatar	152,000	4.	Abu Dhabi	183,500	4.	Abu Dhabi	183,500
5.	Saudi Arabia	123,990	5.	Qatar	156,700	5.	Qatar	156,700
6.	Algeria	106,000	6.	Saudi Arabia	139,900	6.	Saudi Arabia	145,848
7.	Norway	103,180	7.	Norway	105,940	7.	Algeria	104,200
8.	Canada	99,600	8.	Algeria	105,900	8.	Venezuela	102,243
9.	Abu Dhabi	90,000	9.	Canada	98,000	9.	Canada	95,100
10.	Mexico	76,500	10.	Venezuela	95,000	10.	Iraq	95,000
11.	Netherlands	70,400	11.	Nigeria	84,000	11.	Norway	85,500
12.	Venezuela	59,000	12.	Mexico	76,530	12.	Nigeria	85,000
13.	Malaysia	49,440	13.	Indonesia	73,000	13.	Indonesia	83,590
14.	Indonesia	49,440	14.	Netherlands	64,100	14.	Mexico	74,831
15.	Nigeria	47,000	15.	Malaysia	52,200	15.	Netherlands	62,507
16.	Kuwait	35,000	16.	Kuwait	36,400	16.	Malaysia	51,700
17.	United Kingdom	33,400	17.	China	30,700	17.	Kuwait	42,500
18.	China	30,000	18.	Iraq	26,300	18.	China	31,700
19.	Iraq	28,000	19.	Libya	25,700	19.	Argentina	26,700
20.	Argentina	23,000	20.	Argentina	23,600	20.	Libya	25,700
	TOTAL FREE WORLD	2,036,366		TOTAL FREE WORLD	2,287,500		TOTAL FREE WORLD	2,394,641
	TOTAL WORLD	3,632,166		TOTAL WORLD	3,797,500		TOTAL WORLD	3,955,341

Source: U.S.--D.O.E./E.I.A., U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.
Rest of World--Oil and Gas Journal, "Worldwide Report" issue

Section XIII
Table 8

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1974(1)(2)	Nation	1975(1)(2)	Nation	1976(1)(2)
1. United States	21,600.5	1. United States	20,108.7	1. United States	19,952.4
2. U.S.S.R.	9,201.3	2. U.S.S.R.	10,205.9	2. U.S.S.R.	11,331.3
3. Canada	3,045.5	3. Netherlands	3,208.4	3. Netherlands	3,542.7
4. Netherlands	2,956.7	4. Canada	3,075.7	4. Canada	3,157.2
5. United Kingdom	1,230.0	5. People's Republic of China	1,400.0	5. Iran	1,699.6
6. People's Republic of China	1,200.0	6. United Kingdom	1,208.2	6. People's Republic of China	1,433.7
7. Romania	1,011.5	7. Romania	953.5	7. United Kingdom	1,202.3
8. Iran	787.4	8. Iran	771.1	8. Romania	854.6
9. West Germany	713.2	9. West Germany	639.4	9. Mexico	790.8
10. Mexico	560.9	10. Mexico	583.9	10. Nigeria	632.6
11. Italy	540.4	11. Italy	514.3	11. Italy	562.1
12. Venezuela	476.0	12. Venezuela	450.3	12. West Germany	544.0
13. Libya	345.2	13. Libya	382.6	13. Libya	439.2
14. East Germany	273.1	14. East Germany	280.0	14. Venezuela	396.0
15. France	269.4	15. Argentina	271.6	15. Argentina	280.2
16. Argentina	255.7	16. France	259.8	16. Algeria	256.9
17. Saudi Arabia	219.0	17. Poland	210.6	17. France	250.7
18. Poland	202.7	18. Algeria	210.0	18. Indonesia	248.6
19. Algeria	198.5	19. Saudi Arabia	200.0	19. Australia	209.3
20. Kuwait	186.9	20. Brunei	186.5	20. Chile	175.8
Total Free World	35,054.2	Total Free World	33,931.1	Total Free World	36,006.5
Total World	47,171.5	Total World	47,207.3	Total World	50,367.1

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(1) Comprises all gas collected and utilized as fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers even though it is not actually sold.

(2) United States is reported marketed production; all others may include some gross production.

Source: 1974-1975: U.S. Bureau of Mines, World Natural Gas, May 27, 1977
1976: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1977(1)(2)	Nation	1978(1)(2)	Nation	1979(1)(2)
1. United States	20,337.5	1. United States	19,974.0	1. United States	20,471.3
2. U.S.S.R.	12,395.2	2. U.S.S.R.	13,131.6	2. U.S.S.R.	14,367.1
3. Canada	3,301.4	3. Canada	3,133.1	3. Canada	3,646.5
4. Netherlands	2,932.5	4. People's Republic of China	2,352.2	4. People's Republic of China	2,832.7
5. People's Republic of China	1,787.0	5. Iran	1,746.9	5. Netherlands	2,717.8
6. Iran	1,756.1	6. Netherlands	1,624.5	6. United Kingdom	1,965.7
7. United Kingdom	1,499.9	7. United Kingdom	1,262.4	7. Romania	1,210.5
8. Romania	1,005.5	8. Romania	1,211.6	8. Mexico	974.9
9. West Germany	907.7	9. Mexico	887.5	9. Iran	913.3
10. Mexico	745.3	10. West Germany	643.2	10. West Germany	826.3
11. Nigeria	717.4	11. Nigeria	586.6	11. Indonesia	816.3
12. Libya	488.6	12. Indonesia	565.8	12. Italy	533.6
13. Italy	448.6	13. Italy	540.8	13. Norway	414.9
14. Venezuela	392.8	14. Venezuela	401.4	14. Venezuela	406.0
15. Indonesia	351.9	15. Libya	364.0	15. Nigeria	365.6
16. Algeria	284.5	16. Norway	351.8	16. Chile	306.4
17. France	256.8	17. Algeria	328.7	17. Brunei-Malaysia	302.7
18. Argentina	250.0	18. Brunei-Malaysia	325.7	18. Algeria	301.5
19. Australia	236.7	19. Chile	320.7	19. Australia	254.1
20. Chile	208.9	20. Argentina	254.3	20. Argentina	241.7
Total Free World	35,393.2	Total Free World	35,272.8	Total Free World	38,075.1
Total World	53,883.7	Total World	53,911.1	Total World	57,666.5

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(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.

(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

Section XIII
Table 8b

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1980(1)(2)	Nation	1981(1)(2)	Nation	1982(1)(2)
1. United States	20,378.8	1. United States	20,177.7	1. United States	18,519.7
2. U.S.S.R.	15,355.5	2. U.S.S.R.	16,390.0	2. U.S.S.R.	17,685.3
3. People's Republic of China	3,469.0	3. Netherlands	3,054.0	3. Canada	2,546.1
4. Netherlands	2,799.6	4. Canada	2,623.0	4. Netherlands	2,521.7
5. Canada	2,668.3	5. Mexico	1,486.0	5. Mexico	1,549.7
6. United Kingdom	1,500.0	6. Romania	1,440.0	6. United Kingdom	1,276.1
7. Mexico	1,190.5	7. United Kingdom	1,427.0	7. Romania	1,150.0
8. Romania	1,176.4	8. Algeria	1,149.0	8. Norway	861.9
9. Indonesia	1,028.4	9. Indonesia	1,075.0	9. Algeria	828.5
10. West Germany	738.6	10. Norway	923.0	10. Saudi Arabia	591.8
11. Norway	705.2	11. Libya	674.0	11. West Germany	585.3
12. Pakistan	600.0	12. West Germany	636.0	12. Indonesia	568.9
13. Italy	524.6	13. Venezuela	602.0	13. Venezuela	527.2
14. Venezuela	518.0	14. Pakistan	600.0	14. Italy	503.6
15. Algeria	517.0	15. Italy	500.0	15. Australia	415.8
16. Saudi Arabia	310.2	16. People's Republic of China	459.0	16. Argentina	386.2
17. Argentina	296.9	17. Saudi Arabia	435.0	17. Iran	381.5
18. Iran	292.0	18. Australia	377.0	18. China	363.7
19. Kuwait	291.3	19. Kuwait	340.0	19. France	332.6
20. Brunei	282.0	20. Argentina	330.0	20. Pakistan	315.3
Total Free World	37,677.7	Total Free World	39,187.7	Total Free World	35,424.6
Total World	58,747.7	Total World	58,397.7	Total World	55,682.6

(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

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Table 8c

WORLD NATURAL GAS PRODUCTION-TWENTY LEADING NATIONS
(Billions of Cubic Feet)

Nation	1983(1)(2)	Nation	1984(1)(2)	Nation	1985(1)(2)
1. U.S.S.R.	18,903.0	1. U.S.S.R.	20,721.1	1. U.S.S.R.	22,697.9
2. United States	16,822.1	2. United States	18,229.6	2. United States	17,198.0
3. Netherlands	2,678.9	3. Netherlands	2,677.5	3. Canada	3,350.6
4. Canada	2,414.1	4. Canada	2,651.8	4. Netherlands	2,858.8
5. Mexico	1,479.5	5. United Kingdom	1,423.3	5. United Kingdom	1,497.1
6. United Kingdom	1,395.3	6. Mexico	1,373.3	6. Algeria	1,320.0
7. Romania	1,200.0	7. Algeria	1,260.0	7. Mexico	1,312.2
8. Norway	861.4	8. Romania	1,240.0	8. Romania	1,200.0
9. Algeria	707.0	9. Norway	922.6	9. Indonesia	1,056.0
10. West Germany	605.2	10. Indonesia	732.0	10. Norway	902.2
11. Venezuela	559.2	11. Argentina	653.2	11. Argentina	667.3
12 Argentina	549.6	12. West Germany	648.2	12. Venezuela	609.6
13. Iran	500.2	13. Italy	638.9	13. West Germany	608.1
14 Indonesia	481.8	14. Venezuela	609.6	14. China	600.0
15. Italy	450.1	15. Australia	444.4	15. Iran	480.0
16. Australia	423.5	16. China	420.0	16. Australia	473.7
17 Saudi Arabia	381.5	17. France	373.4	17. Italy	448.9
18. China	371.0	18. Iran	360.0	18. Pakistan	355.3
19. Pakistan	341.4	19. Pakistan	355.2	19. United Arab Emirates	336.0
20. Brunei	316.3	20. Brunei	312.0	20. Brunei	300.0
Total Free World	33,924.6	Total Free World	36,821.8	Total Free World	36,990.3
Total World	55,307.6	Total World	60,093.9	Total World	62,443.7

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(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.
(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; other nations, Oil and Gas Journal

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Table 8d

WORLD NATURAL GAS PRODUCTION--TWENTY LEADING NATIONS
(Billions of Cubic Feet)

	Nation	1986(1)(2)		Nation	1987(1)(2)
1.	U.S.S.R.	24,215.8	1.	U.S.S.R.	25,673.8
2.	United States	16,791.0	2.	United States	17,150.0
3.	Canada	3,168.3	3.	Canada	3,472.7
4.	Netherlands	2,623.3	4.	Netherlands	2,731.2
5.	United Kingdom	1,634.0	5.	United Kingdom	1,655.3
6.	Mexico	1,252.3	6.	Algeria	1,471.6
7.	Algeria	1,238.3	7.	Mexico	1,277.4
8.	Romania	1,210.2	8.	Romania	1,267.8
9.	Indonesia	1,559.9	9.	Indonesia	1,234.8
10.	Norway	906.2	10.	Norway	994.1
11.	Argentina	661.8	11.	Saudi Arabia	740.9
12.	China	646.0	12.	Italy	697.2
13.	Venezuela	615.1	13.	Venezuela	680.3
14.	West Germany	545.4	14.	Iran	670.7
15.	Italy	527.3	15.	Argentina	659.6
16.	Australia	524.1	16.	West Germany	658.9
17.	Iran	489.3	17.	United Arab Emirates	575.0
18.	Pakistan	390.3	18.	Australia	532.8
19.	United Arab Emirates	362.1	19.	Malaysia	460.9
20	Saudi Arabia	328.7	20.	Pakistan	419.8
	Total Free World	36,698.0		Total Free World	39,468.5
	Total World	63,786.2		Total World	68,211.0

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(1) Comprises all gas collected and utilized as a fuel or as a chemical industry raw material, including gas used in oil and/or gas fields as a fuel by producers, even though it is not actually sold.

(2) United States is reported marketed production; all others may include some gross production.

Source: U.S. Energy Information Administration, United States only; Other nations, Oil and Gas Journal.

Section XIII
Table 9

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE

(Millions of Cubic Feet)

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
AL	-	-	-	2	1	4	41	87	282	42	190	323
AK	-	-	-	-	-	-	-	-	-	--	--	50
AZ	-	-	-	-	-	-	-	-	15	21	--	--
AR	50,630	53,946	47,788	48,047	44,656	42,325	41,510	33,471	32,123	30,162	31,327	32,890
CA	560,510	570,954	550,903	558,398	566,751	517,450	531,346	507,289	538,178	504,458	492,338	465,582
CO	8,392	8,967	8,490	11,168	14,128	34,260	28,509	45,705	49,152	54,205	95,259	82,464
FL	8	27	39	8	10	15	34	35	36	35	34	35
IL	17,023	14,062	12,391	13,285	11,425	10,183	9,282	9,475	8,033	6,177	9,647	12,983
IN	877	553	334	956	845	836	701	735	1,226	791	671	378
KS	209,321	245,189	294,078	364,024	417,538	412,544	420,607	412,369	471,041	526,091	586,690	561,816
KY	96,459	70,095	51,851	73,316	76,097	73,427	71,405	72,713	73,214	73,687	70,024	72,248
LA	581,398	686,061	732,845	831,771	1,054,199	1,237,143	1,293,644	1,399,222	1,680,032	1,886,302	2,078,901	2,451,587
MD	-	-	-	373	3,422	2,372	1,408	1,394	3,116	4,619	4,649	4,266
MI	18,812	14,981	14,753	11,250	11,194	9,052	7,774	6,962	8,300	10,911	9,122	14,243
MS	40,037	59,899	68,062	114,153	158,845	174,100	154,254	140,448	163,167	185,137	169,967	160,143
MO	38	27	24	21	14	16	15	16	15	12	12	-
MT	34,282	36,551	35,291	39,186	36,424	28,714	27,889	30,252	28,255	25,847	28,638	27,989
NE	-	-	-	17	3,895	5,568	6,748	6,801	12,515	13,541	14,249	11,405
NM	142,740	194,749	204,961	212,909	300,169	359,377	399,086	449,346	540,664	626,340	723,004	761,446
NY	4,600	4,705	3,693	3,336	3,214	3,627	2,347	2,590	3,637	4,098	2,869	2,808
ND	442	643	533	608	456	369	498	1,093	5,256	11,725	15,450	17,325
OH	68,946	65,619	46,512	43,163	38,879	30,993	37,542	28,824	33,756	25,368	30,384	31,786
OK	419,010	480,573	435,262	482,360	538,756	554,033	599,955	616,355	614,976	678,603	719,794	696,504
PA	91,971	87,578	84,739	91,137	128,715	108,684	105,558	145,934	99,172	104,508	101,801	95,869
SD	6	2	1	-	7	6	5	7	-	-	-	-
TN	80	127	83	132	132	107	89	89	39	45	38	54
TX	1,992,704	2,289,923	2,588,921	3,126,402	3,781,136	4,147,805	4,383,158	4,551,232	4,730,798	4,999,889	5,156,215	5,178,073
UT	6,040	6,610	6,126	3,950	3,733	3,006	7,075	16,024	17,163	17,268	16,824	19,247
VA	64	74	65	46	64	1,133	3,697	1,401	968	2,926	2,465	2,521
WV	192,233	203,681	181,176	189,980	191,146	180,995	186,477	191,601	212,403	204,717	202,440	204,581
WY	45,550	52,424	50,815	62,062	71,508	75,313	76,262	71,068	77,819	84,398	117,256	121,682
TOT	4,582,173	5,148,020	5,419,736	6,282,060	7,457,359	8,013,457	8,396,916	8,742,546	9,405,351	10,081,923	10,680,258	11,030,298

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 9a

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

State	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
AL	172	57	56	128	177	165	203	252	248	230	180	627
AK	133	246	631	2,184	4,498	6,238	7,255	11,267	14,438	17,343	50,864	111,576
AZ	-	-	-	230	1,334	2,014	3,106	3,161	1,255	881	1,136	1,101
AR	40,674	55,451	59,547	66,213	76,101	75,753	82,831	105,174	116,522	156,627	169,257	181,351
CA	485,655	517,535	556,241	564,220	646,486	660,444	660,384	689,607	681,080	714,893	677,689	649,117
CO	99,899	107,404	108,142	101,826	105,705	113,691	126,381	136,667	116,857	121,424	118,754	105,804
FL	34	30	29	29	35	40	107	212	123	108	50	--
IL	13,739	11,666	9,970	10,650	9,459	7,824	7,396	7,230	5,144	4,380	3,800	4,850
IN	484	342	382	284	286	199	239	215	198	234	171	153
KS	604,410	634,410	649,083	694,352	732,946	764,073	793,379	847,495	871,971	835,555	883,156	899,955
KY	73,504	75,329	70,937	70,241	74,634	76,940	78,976	76,536	89,168	89,024	81,304	77,892
LA	2,670,271	2,988,414	3,271,857	3,525,456	3,928,427	4,152,731	4,466,786	5,081,435	5,716,857	6,416,015	7,227,826	7,788,276
MD	4,373	4,065	3,578	2,472	1,633	1,373	408	696	621	864	978	813
MI	18,916	20,790	27,697	28,987	32,850	31,388	34,558	34,120	33,589	40,480	36,163	38,851
MS	162,095	172,478	172,543	170,271	176,807	180,428	166,825	156,652	139,497	135,051	131,234	126,031
MO	-	75	90	92	100	107	84	-	121	14	126	87
MT	30,743	33,418	33,901	29,955	30,026	25,051	28,105	30,685	25,866	19,313	41,229	42,705
NE	13,128	15,258	15,743	14,880	13,051	11,094	10,720	10,196	8,453	8,129	6,989	5,991
NM	739,660	798,928	789,662	804,612	808,377	873,947	937,205	998,076	1,067,510	1,164,182	1,138,133	1,138,980
NY	2,915	4,990	5,742	4,262	3,962	3,108	3,340	2,699	3,837	4,632	4,861	3,358
ND	17,915	19,483	20,100	25,155	32,798	34,512	35,652	46,585	40,462	41,023	33,587	34,889
OH	34,664	36,074	36,423	36,747	36,817	37,106	35,684	43,133	41,315	42,673	49,793	52,113
OK	811,508	824,266	892,697	1,060,717	1,233,883	1,316,201	1,320,995	1,351,225	1,412,952	1,390,884	1,523,715	1,594,943
PA	99,366	113,928	100,427	90,053	92,657	81,720	84,461	90,914	89,966	87,987	79,134	76,841
SD	-	-	-	-	-	-	-	-	-	-	-	-
TN	52	63	71	75	90	77	85	-	58	48	57	64
TX	5,718,993	5,892,704	5,963,605	6,080,210	6,205,034	6,490,202	6,636,555	6,953,790	7,188,900	7,495,414	7,853,199	8,357,716
UT	38,921	51,040	57,175	74,128	77,122	79,739	71,616	69,366	48,965	46,151	46,733	42,781
VA	2,280	2,227	2,466	2,499	2,085	1,600	3,152	4,249	3,818	3,389	2,846	2,805
WV	204,633	208,757	210,556	210,698	210,223	202,765	207,416	211,610	211,460	236,971	231,759	242,452
WY	156,978	181,610	194,674	204,996	209,060	231,613	235,849	243,381	240,074	248,481	303,517	338,520
TOT	12,046,115	12,771,038	13,254,025	13,876,622	14,746,663	15,462,143	16,039,753	17,206,628	18,171,325	19,322,400	20,698,240	21,920,642

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Bureau of Mines, Natural Gas Annuals

Section XIII
Table 9b

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
AL	355	3,644	11,271	27,865	37,814	41,427	57,227	85,599	85,815	105,527	119,334	75,003
AK	121,618	125,596	131,007	128,935	160,270	166,072	187,889	203,088	220,754	230,588	242,564	264,364
AZ	868	442	125	224	208	282	240	286	247	214	187	99
AR	172,154	166,522	157,529	123,975	116,237	109,533	104,096	106,792	109,452	111,808	92,986	124,611
CA	612,629	487,278	449,369	365,354	318,308	354,334	311,462	311,084	248,206	309,783	380,730	383,977
CO	108,537	116,949	137,725	144,629	171,629	183,972	188,792	183,693	191,239	190,814	199,146	209,892
FL	903	15,521	33,857	38,137	44,383	43,165	48,171	51,595	50,190	45,744	35,938	22,515
IL	498	1,194	1,638	1,436	1,440	1,556	1,003	1,159	1,585	1,574	1,295	1,162
IN	537	355	276	176	346	192	183	163	350	463	330	233
KS	885,144	889,268	893,118	886,782	843,625	829,170	781,289	854,484	797,762	735,035	640,114	429,597
KY	72,723	63,648	62,396	71,876	60,511	66,137	60,902	70,044	59,520	57,180	61,312	51,924
LA	8,081,907	7,972,678	8,242,423	7,753,631	7,090,645	7,006,596	7,215,006	7,476,497	7,266,217	6,939,924	6,780,184	6,171,627
MD	214	244	298	133	93	75	82	88	28	68	56	36
MI	25,662	34,221	44,579	69,133	102,113	119,262	129,954	148,047	159,731	158,302	152,593	153,051
MS	118,805	103,989	99,706	78,787	74,345	70,762	82,995	106,579	144,077	185,469	211,371	167,231
MO	22	9	33	33	30	29	20	-	-	-	-	-
MT	32,720	33,474	56,175	54,873	40,734	42,563	46,819	46,522	53,888	51,867	56,565	56,517
NE	3,496	3,478	3,836	2,538	2,565	2,511	2,789	2,882	3,208	2,550	2,519	2,280
NM	1,167,577	1,216,061	1,218,749	1,244,779	1,217,430	1,230,976	1,202,973	1,174,198	1,181,363	1,149,781	1,134,113	991,178
NY	2,202	3,679	4,539	4,990	7,628	9,235	10,682	13,900	15,500	15,643	16,074	15,877
ND	33,864	32,472	27,703	31,206	24,786	31,470	29,173	30,499	18,468	42,346	42,573	53,818
OH	79,903	89,995	93,610	92,055	84,960	88,891	99,327	114,098	123,481	138,856	141,134	138,391
OK	1,684,260	1,806,887	1,770,980	1,638,942	1,605,410	1,726,513	1,769,519	1,773,582	1,835,366	1,891,824	2,019,199	1,934,412
OR	-	-	-	-	-	-	-	-	2	5	5	3
PA	76,451	73,958	78,514	82,637	84,676	89,386	91,717	97,763	96,313	97,439	122,454	121,111
SD	-	-	-	-	-	-	-	-	914	1,193	1,155	2,311
TN	89	25	20	17	27	47	263	468	941	1,241	1,719	2,976
TX	8,550,705	8,657,840	8,513,850	8,170,798	7,485,764	7,191,859	7,051,027	6,548,184	7,174,623	7,251,879	7,050,207	6,468,817
UT	42,418	39,474	42,715	50,522	55,354	57,416	60,696	58,416	58,605	87,766	91,191	94,255
VA	2,619	2,787	5,101	7,096	6,723	6,937	8,220	8,492	8,544	7,812	8,903	6,880
WV	234,027	214,951	208,676	202,306	154,484	153,322	152,767	148,564	150,505	156,551	161,251	150,850
WY	380,105	375,059	357,731	326,657	316,123	328,768	330,180	357,267	414,416	409,541	410,499	424,657
TOT	22,493,012	22,531,698	22,647,549	21,600,522	20,108,661	19,952,438	20,025,463	19,974,033	20,471,260	20,378,787	20,177,701	18,519,675

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Energy Information Administration, Natural Gas Annuals

U.S. MARKETED PRODUCTION(1) OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1983	1984	1985	1986	1987
Alabama	90,801	101,821	107,342	107,184	117,241
Alaska	276,691	289,129	321,346	302,841	359,837
Arizona	132	45	85	63	60
Arkansas	127,561	135,161	155,099	131,075	141,151
California	415,324	476,333	491,283	462,218	424,621
Colorado	163,545	173,257	178,233	163,684	164,557
Florida	21,056	12,585	10,545	8,833	8,281
Illinois	1,030	1,530	1,324	1,887	1,371
Indiana	135	392	367	365	217
Kansas	434.736	465,979	512,872	465,695	457,050
Kentucky	46,720	61,518	73,126	80,195	70,125
Louisiana	5,332,113	5,825,055	5,012,702	4,895,394	5,122,509
Maryland	31	60	39	20	44
Michigan	138,910	144,537	131,855	127,287	146,996
Mississippi	151,204	157,911	144,172	140,833	139,727
Missouri	0	4	4	4	4
Montana	51,967	51,474	52,494	46,592	46,456
Nebraska	2,091	2,300	1,944	1,403	1,261
New Mexico	895,279	957,366	905,272	702,614	823,773
New York	17,836	25,200	31,561	29,964	25,676
North Dakota	69,319	70,496	72,633	55,098	62,258
Ohio	151,300	186,480	182,245	182,072	166,593
Oklahoma	1,730,061	1,985,869	1,936,341	1,917,493	2,004,797
Oregon	3	2,790	4,080	4,600	3,800
Pennsylvania	118,372	166,342	150,234	159,889	163,318
South Dakota	1,846	1,947	2,558	2,231	3,431
Tennessee	3,950	5,022	4,686	3,464	2,707
Texas	5,938,561	6,185,021	6,052,663	6,151,775	6,126,315
Utah	63,158	74,698	83,405	90,013	87,158
Virginia	4,346	8,901	15,041	15,427	19,223
West Virginia	130,178	143,730	144,883	135,431	160,000
Wyoming	443,988	516,683	416,565	403,266	497,980
TOTAL	16,822,144	18,229,638	17,197,999	16,790,910	17,348,537

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(1) Marketed production of natural gas represents gross withdrawals less gas used for repressuring and quantities vented and flared.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals

Section XIII
Table 10

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
AL	50,713	61,113	71,072	92,466	111,030	125,874	136,825	139,551	151,325	160,261	165,772	172,406
AK	-	-	-	-	-	-	-	-	-	-	-	-
AZ	27,768	34,983	44,489	53,419	62,046	63,111	71,210	75,568	88,983	105,860	105,536	105,034
AR	102,779	112,675	113,922	135,609	155,524	165,603	176,489	192,378	197,374	196,297	201,306	202,361
CA	548,382	617,615	619,323	683,924	787,848	792,520	862,243	933,934	1,020,395	1,021,002	1,091,236	1,078,855
CO	49,027	60,585	73,664	88,692	102,769	101,835	115,922	126,048	143,018	145,640	176,936	165,099
CT	-	-	-	-	-	1,039	5,833	11,415	14,187	18,109	20,328	27,884
DE	-	-	708	1,022	1,679	2,276	1,972	2,980	4,280	5,824	6,014	8,301
DC	8,474	9,361	9,305	10,694	11,904	12,782	13,134	14,261	15,042	15,833	15,701	17,594
FL	7,891	8,973	10,185	12,348	13,044	16,001	19,577	23,159	26,402	35,322	38,871	44,174
GA	41,368	47,552	58,824	67,894	94,596	108,329	122,742	132,069	133,044	148,567	154,778	164,114
ID	-	-	-	-	-	-	-	-	-	765	10,733	15,903
IL	132,153	168,796	202,546	235,211	250,812	344,705	350,980	391,408	398,718	417,443	422,840	452,006
IN	42,528	50,774	55,263	58,620	69,177	96,124	103,444	116,308	126,897	140,135	145,179	154,583
IA	40,948	50,350	57,620	66,233	79,640	94,951	106,755	119,876	138,661	147,892	154,964	159,982
KS	191,952	199,893	206,593	242,603	278,892	279,632	283,604	293,784	309,028	324,335	343,833	362,280
KY	36,938	41,357	45,504	61,323	74,386	87,006	104,781	110,039	117,496	126,580	132,436	136,990
LA	375,206	426,837	450,712	475,500	549,305	599,312	594,656	636,704	774,320	839,393	840,331	931,203
ME	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
MD	3,402	4,280	4,821	13,813	22,286	26,468	29,470	35,010	39,889	47,553	51,177	57,328
MA	-	-	-	-	1,783	11,386	17,683	35,486	43,932	50,691	56,626	67,602
MI	80,571	75,978	84,315	127,180	154,283	163,991	178,307	188,922	207,005	243,465	272,353	298,104
MN	43,198	52,376	59,040	67,861	84,205	97,591	104,508	115,140	123,734	136,831	147,732	149,042
MS	52,461	65,245	60,987	76,918	97,786	119,638	118,617	136,797	138,186	145,353	148,279	157,169
MO	78,101	90,883	99,667	140,384	156,922	168,992	173,674	188,349	199,272	219,424	223,528	241,239
MT	30,919	32,919	34,361	38,544	37,481	40,771	39,934	40,624	47,491	47,690	52,200	51,825
NE	39,699	47,647	51,911	61,742	72,386	78,544	83,384	93,189	102,177	109,265	116,326	114,661
NV	-	-	-	-	-	-	-	982	2,484	6,676	8,666	8,826
NH	-	-	-	-	3	316	857	1,065	1,206	1,445	1,787	2,421
NJ	-	-	3,172	3,209	30,887	40,409	58,685	65,718	74,601	90,092	100,483	119,946
NM	102,766	110,132	127,423	147,509	174,808	194,748	200,039	177,221	215,281	229,821	243,800	251,518
NY	41,572	44,200	51,064	65,157	144,920	180,747	197,878	225,844	243,513	268,408	299,153	343,326
NC	-	-	-	-	1,631	2,945	6,172	9,436	12,644	16,579	19,533	23,519
ND	2,608	2,712	2,686	3,279	3,408	3,342	3,559	4,820	9,320	10,428	13,753	15,639
OH	221,571	236,137	246,212	324,594	375,820	393,250	420,809	442,523	500,865	561,557	583,753	618,022
OK	254,522	277,955	258,579	286,793	307,887	319,908	333,972	327,936	334,057	358,930	387,277	342,080
OR	-	-	-	-	-	-	-	-	-	4,473	18,227	22,752
PA	175,906	191,631	209,749	263,199	311,937	324,187	335,457	353,185	390,280	431,325	445,813	465,732
RI	-	-	-	-	-	-	670	4,423	5,375	6,242	8,139	9,940
SC	-	-	-	-	853	2,896	8,772	16,573	23,043	44,467	39,741	39,678
SD	8,016	8,540	8,212	10,001	11,447	11,701	13,688	15,564	16,107	18,002	18,251	19,535
TN	33,986	37,766	41,609	67,813	88,078	99,817	106,130	114,869	118,052	126,815	130,601	142,860
TX	1,444,422	1,605,955	1,658,379	1,824,553	2,130,377	2,175,100	2,194,172	2,198,175	2,236,540	2,323,847	2,455,528	2,555,541
UT	20,919	21,627	24,338	26,368	29,014	30,929	34,592	41,073	48,903	54,669	57,004	55,706
VT	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
VA	3,055	3,877	4,324	7,639	14,853	18,630	27,716	35,604	38,884	43,362	48,527	56,052
WA	-	-	-	-	-	-	-	-	-	5,224	40,108	53,063
WV	106,105	112,702	111,802	132,273	139,608	146,153	148,017	138,846	158,006	161,246	159,520	164,347
WI	267	323	1,696	15,380	28,382	33,632	36,339	39,287	40,621	48,188	59,592	67,596
WY	26,351	31,400	31,407	36,637	38,865	36,287	36,070	36,709	39,705	45,552	45,504	46,810
TOT	4,426,544	4,945,149	5,195,484	6,026,404	7,102,562	7,613,478	7,979,338	8,402,852	9,070,343	9,706,878	10,279,775	10,760,648

(1) Included with New Hampshire.

Source: U.S. Bureau of Mines, Natural Gas Annuals

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
AL	178,595	184,118	184,909	194,369	205,763	222,047	229,152	233,098	254,176	287,212	300,892	298,497
AK	133	229	557	2,137	4,214	5,781	6,922	10,784	11,889	17,548	42,726	63,726
AZ	112,722	135,494	153,674	157,892	157,494	162,570	154,489	162,320	158,766	176,547	195,476	192,996
AR	218,528	216,516	209,420	224,744	251,129	273,671	281,825	295,078	295,460	321,569	349,990	381,951
CA	1,180,331	1,311,253	1,405,882	1,476,322	1,554,126	1,737,341	1,757,292	1,884,878	1,911,132	2,046,080	2,048,534	2,126,466
CO	196,057	207,464	212,611	204,940	207,663	236,325	236,745	233,896	231,508	256,820	272,437	282,328
CT	25,875	28,453	30,361	32,227	34,809	37,502	40,822	47,695	49,780	53,202	57,485	60,574
DE	9,459	9,035	9,380	14,492	16,378	17,091	17,969	19,045	21,063	24,059	25,863	26,421
DC	17,123	18,142	18,518	19,338	19,359	20,633	21,210	(2)	(2)	(2)	(2)	(2)
FL	91,490	137,875	143,656	157,735	177,496	185,249	188,389	212,278	225,531	273,524	311,885	336,816
GA	180,342	182,087	179,957	192,638	187,600	206,691	211,321	233,291	254,334	283,115	311,543	332,526
ID	19,641	22,006	23,969	25,806	26,635	30,825	33,889	36,104	34,283	39,479	41,436	46,570
IL	518,111	536,549	574,346	620,309	658,432	731,921	772,092	854,149	948,353	994,404	1,085,392	1,173,878
IN	171,158	212,851	239,932	272,309	297,897	333,718	357,882	399,905	434,632	454,013	530,981	545,368
IA	182,827	187,138	204,663	213,552	219,005	243,634	247,513	239,478	272,850	297,498	318,341	348,662
KS	380,241	372,302	364,957	380,055	387,880	433,429	464,337	507,704	450,963	496,550	547,227	575,694
KY	147,993	159,710	161,912	168,138	175,928	185,780	182,828	160,392	192,464	196,807	234,882	248,048
LA	893,369	947,938	1,036,887	1,007,041	1,070,471	1,139,186	1,155,260	1,258,776	1,394,376	1,521,492	1,762,955	1,840,840
ME	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
MD	60,674	64,923	68,390	76,551	81,774	86,813	93,957	117,208	139,853	149,125	168,944	182,135
MA	72,994	77,886	81,768	89,015	98,447	106,699	114,227	116,198	128,217	132,325	136,988	147,307
MI	332,756	368,531	407,732	443,677	463,667	500,628	558,240	619,863	686,095	700,538	776,573	809,124
MN	161,390	179,827	192,584	214,130	219,047	236,976	248,741	264,488	283,086	311,898	325,687	342,322
MS	183,158	188,864	190,930	199,733	227,184	252,023	249,845	286,390	282,160	312,891	326,165	360,382
MO	255,095	261,372	274,487	289,482	303,075	325,194	341,144	351,768	360,703	365,546	398,697	429,526
MT	52,183	54,569	57,781	63,298	67,337	67,652	70,895	73,829	65,038	62,898	78,283	87,791
NE	132,651	139,028	143,169	146,043	149,014	164,224	168,032	198,592	188,661	203,345	210,033	222,335
NV	10,450	12,447	15,864	17,528	19,292	23,928	27,679	34,218	35,035	37,029	44,140	52,558
NH	2,480	2,852	3,018	3,315	3,596	3,813	4,084	5,567	6,578	6,630	9,196	10,691
NJ	132,984	139,258	153,806	174,210	188,249	200,109	209,757	227,271	251,482	268,495	304,835	322,853
NM	272,922	266,409	288,455	292,495	275,969	257,173	263,798	261,918	255,590	260,774	251,905	270,103
NY	379,928	419,460	435,417	474,384	506,942	513,828	544,414	631,808	589,120	639,845	683,688	710,885
NC	32,685	45,442	50,523	56,373	62,296	68,533	75,745	86,753	97,981	114,809	136,651	151,227
ND	16,981	17,274	19,625	22,196	23,765	26,232	30,318	40,836	31,858	33,053	32,682	32,717
OH	670,618	698,569	719,674	756,398	797,318	824,111	879,639	944,767	962,821	987,841	1,031,963	1,052,933
OK	379,178	383,042	378,096	485,726	588,245	598,631	524,404	490,032	449,378	496,465	546,191	597,196
OR	27,498	30,861	33,827	37,865	43,350	53,984	56,065	65,093	69,877	79,226	87,854	95,284
PA	502,066	520,788	529,716	550,080	585,426	607,277	629,485	677,111	678,478	717,909	765,941	772,388
RI	11,011	11,839	12,780	13,794	14,725	15,465	16,349	16,684	18,493	20,704	22,555	25,093
SC	54,363	58,532	60,928	70,645	75,099	78,716	86,865	96,437	100,539	127,514	140,826	159,830
SD	23,584	24,533	25,820	27,413	25,159	27,639	26,974	28,256	27,735	28,815	33,826	36,319
TN	149,462	155,623	160,667	167,737	169,418	181,476	201,499	226,025	232,212	234,288	247,857	256,148
TX	2,865,595	2,981,167	3,030,914	3,209,968	3,313,837	3,377,093	3,482,821	3,709,715	3,485,246	3,696,396	3,877,376	4,093,357
UT	61,401	75,650	81,879	92,890	103,628	119,625	114,601	106,474	105,052	109,866	119,879	121,937
VT	(1)	(1)	(1)	(1)	(1)	-	-	(1)	(1)	(1)	(1)	(1)
VA	59,842	66,181	70,579	77,254	83,011	89,072	95,700	121,702	115,887	121,928	128,748	136,523
WA	58,650	64,934	70,343	81,431	86,834	105,789	108,108	116,879	127,230	139,421	144,521	149,992
WV	191,548	179,969	192,221	188,602	190,264	182,515	179,084	183,109	151,078	183,003	169,841	181,278
WI	82,377	90,620	113,679	136,516	152,354	170,202	200,484	224,675	248,033	271,765	316,279	337,822
WY	59,119	59,635	61,451	67,336	69,879	67,559	70,298	79,174	73,284	78,801	100,071	109,996
TOT	11,819,638	12,509,427	13,081,714	13,890,129	14,640,480	15,536,373	16,033,189	17,191,711	17,388,360	18,632,062	20,056,240	21,139,386

Note: Consumption includes volumes of natural gas which is distributed as a component of mixed gas.
(1) Included with New Hampshire.
(2) Included with Maryland.
Source: 1947-1966 U.S. Bureau of Mines, Mineral Yearbooks--Fuels
1967-Present U.S. Energy Information Administration, Natural Gas Annual

Section XIII
Table 10b

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	285,973	278,467	272,068	274,761	264,088	225,979	241,237	237,258	283,435	269,240
Alaska	67,706	74,658	63,073	62,874	84,751	90,121	116,278	145,025	157,236	153,345
Arizona	213,313	227,909	214,323	192,446	156,222	171,275	167,092	175,041	172,738	165,850
Arkansas	333,644	316,375	327,803	290,393	258,220	248,941	229,558	220,699	250,747	273,720
California	2,149,264	2,185,543	2,045,627	1,834,413	1,832,849	1,756,611	1,772,041	1,563,172	1,810,381	1,807,731
Colorado	289,369	309,703	324,007	313,056	307,772	302,284	282,215	267,838	292,272	256,363
Connecticut	61,434	64,008	62,609	66,343	64,011	65,855	64,068	65,191	67,957	72,583
Delaware	26,452	24,088	22,949	20,365	18,603	19,182	15,787	20,626	24,981	29,797
Dist. of Col.	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	27,868
Florida	336,721	298,977	311,498	289,551	280,095	289,017	302,344	318,344	344,177	316,588
Georgia	342,579	331,143	348,089	330,339	326,559	261,320	264,665	278,272	312,299	315,201
Idaho	50,096	56,630	56,045	53,057	60,451	47,156	45,537	44,210	54,237	49,047
Illinois	1,229,277	1,207,289	1,150,266	1,149,394	1,095,115	1,175,235	1,167,099	1,174,934	1,142,732	1,089,720
Indiana	566,996	576,948	542,300	531,872	477,341	425,221	398,268	440,955	504,185	489,254
Iowa	344,639	344,516	364,640	367,595	345,798	311,425	280,246	238,229	291,521	269,581
Kansas	606,989	628,109	604,460	587,013	498,727	515,197	506,910	519,346	584,236	488,338
Kentucky	244,360	255,208	245,472	228,003	207,539	245,967	219,521	212,913	218,689	202,284
Louisiana	1,883,924	1,939,762	2,009,859	2,008,364	1,788,588	2,043,705	2,190,848	2,249,172	1,978,382	1,794,007
Maine	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2,268
Maryland	188,371	204,922	201,961	199,331	165,932	176,272	158,838	161,695	201,584	160,244
Massachusetts	156,451	160,280	155,547	155,268	153,967	156,247	160,343	160,503	156,459	182,587
Michigan	850,562	864,770	920,351	936,043	884,184	888,035	741,295	789,594	875,726	865,137
Minnesota	351,442	351,408	360,811	351,644	331,186	320,156	293,381	313,229	334,202	285,846
Mississippi	378,321	377,986	313,992	276,199	230,053	199,122	197,689	203,719	254,366	263,530
Missouri	429,105	425,215	426,807	409,884	369,620	380,258	366,970	358,905	347,257	318,450
Montana	88,271	84,322	90,230	79,909	79,520	74,371	70,956	72,649	69,805	60,724
Nebraska	223,674	224,562	229,632	222,807	218,834	198,634	188,804	163,051	170,013	163,079
Nevada	66,511	69,522	73,072	63,438	61,251	66,797	71,052	64,506	84,433	58,454
New Hampshire	12,088	13,267	13,881	14,697	13,534	13,545	13,609	14,039	14,881	9,474
New Jersey	326,768	321,288	301,566	275,050	244,102	321,535	247,120	228,843	260,579	339,825
New Mexico	269,368	287,993	256,811	257,436	240,260	278,976	229,813	213,698	211,182	221,793
New York	716,550	692,730	682,547	627,493	576,883	595,933	561,698	569,702	623,891	737,443
North Carolina	160,567	163,897	160,871	140,217	114,822	101,175	72,527	81,989	130,884	153,316
North Dakota	33,577	36,473	32,428	35,459	36,826	41,177	37,650	39,067	29,236	22,848
Ohio	1,087,126	1,147,804	1,104,156	1,086,651	956,876	1,005,927	847,497	929,593	898,029	896,983
Oklahoma	611,582	629,757	611,738	660,010	668,819	760,110	766,986	770,249	824,908	722,318
Oregon	100,897	110,360	107,961	98,051	109,898	92,500	72,521	86,140	93,707	78,703
Pennsylvania	802,132	828,961	783,297	715,548	653,742	713,518	668,337	673,770	740,818	775,715
Rhode Island	25,662	22,494	20,559	23,781	23,129	20,697	25,631	23,042	27,219	27,630
South Carolina	156,263	144,120	153,147	131,991	122,949	148,989	138,585	117,573	119,319	142,228
South Dakota	31,832	34,077	31,221	32,076	32,534	39,207	36,097	35,423	25,724	24,078
Tennessee	265,011	277,275	293,620	260,171	217,328	212,326	202,135	184,048	226,477	229,661
Texas	4,364,728	4,412,636	4,621,378	4,463,488	3,944,377	3,975,307	4,143,023	4,211,432	4,001,355	4,091,099
Utah	121,403	124,093	123,106	121,015	124,160	146,205	106,315	118,513	126,047	115,092
Vermont	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	3,991
Virginia	144,014	155,658	152,848	143,650	121,320	123,509	118,020	134,144	134,088	158,479
Washington	156,663	170,448	197,861	182,723	164,334	148,781	142,657	127,280	158,515	128,770
West Virginia	178,380	199,141	186,316	182,370	158,435	150,723	144,535	151,839	148,538	143,047
Wisconsin	348,132	320,826	367,961	381,148	364,801	315,154	349,160	370,726	367,517	351,857
Wyoming	115,286	125,834	108,599	95,746	87,188	86,819	83,623	87,292	93,797	68,975
U.S. Total	21,793,454	22,101,452	22,049,363	21,223,133	19,537,593	19,946,496	19,520,581	19,627,478	20,240,761	19,877,293(3)

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(1) Included with New Hampshire.
(2) Included with Maryland.
(3) Total includes 3,131 MMcf from Hawaii in 1980.
(4) Total may not add due to independent rounding.
Source: U.S. Energy Information Administration, Natural Gas Annuals

U.S. CONSUMPTION OF NATURAL GAS BY STATE
(Millions of Cubic Feet)

STATE	1981(1)	1982	1983	1984	1985	1986	1987
Alabama	271,280	240,957	221,583	231,997	219,455	202,923	207,757
Alaska	121,727	237,881	239,200	257,525	212,765	206,452	249,269
Arizona	182,533	135,031	115,233	121,149	130,776	101,249	108,976
Arkansas	264,787	226,941	206,966	210,021	195,633	199,197	169,626
California	1,858,178	1,682,718	1,535,031	1,669,705	1,846,078	1,531,323	1,934,909
Colorado	211,780	224,991	213,812	229,647	218,942	197,847	210,046
Connecticut	76,829	78,246	74,427	81,139	78,215	78,903	91,842
Delaware	30,643	27,833	34,884	42,962	38,493	33,009	36,703
Dist. of Col.	29,023	29,280	29,340	29,449	28,902	29,586	30,988
Florida	337,557	324,807	306,307	303,309	289,706	288,541	300,339
Georgia	316,613	294,651	295,531	307,323	281,805	279,082	303,420
Hawaii	2,899	2,804	2,669	2,375	2,483	2,463	2,610
Idaho	44,960	39,971	35,179	38,604	39,194	34,721	37,147
Illinois	1,061,957	994,179	938,340	1,032,779	962,039	924,280	873,436
Indiana	496,349	467,842	426,770	452,284	432,958	395,181	412,588
Iowa	253,231	237,089	220,517	234,846	225,903	206,902	200,877
Kansas	428,130	400,920	346,204	363,671	355,467	312,680	325,866
Kentucky	199,445	188,536	174,306	189,255	172,510	167,713	171,190
Louisiana	1,781,716	1,556,052	1,412,983	1,594,346	1,386,365	1,438,563	1,500,679
Maine	2,326	2,691	2,424	2,445	2,531	2,473	2,641
Maryland	175,289	157,990	145,628	158,989	150,838	152,542	168,553
Massachusetts	184,575	195,107	191,815	208,758	218,884	186,350	226,820
Michigan	800,873	748,141	696,455	718,103	709,232	671,323	657,396
Minnesota	266,282	262,039	240,777	255,638	257,480	244,772	231,750
Mississippi	242,987	269,131	237,859	268,560	226,663	214,824	208,582
Missouri	283,514	279,449	258,560	264,954	259,900	241,660	231,941
Montana	52,452	52,208	46,249	48,864	47,265	41,148	38,786
Nebraska	138,322	138,238	129,920	134,465	126,135	104,732	102,719
Nevada	73,182	46,627	41,926	42,256	39,200	33,790	41,333
New Hampshire	10,220	10,078	9,655	10,531	10,629	10,291	11,970
New Jersey	390,121	375,660	405,387	418,220	379,230	353,465	421,200
New Mexico	196,212	204,163	178,698	161,850	151,128	134,198	153,247
New York	760,463	775,268	720,398	790,011	762,261	728,802	756,559
North Carolina	152,496	142,129	136,579	143,854	133,825	135,819	148,653
North Dakota	34,445	28,370	26,126	30,153	28,096	25,471	24,828
Ohio	870,341	813,519	747,268	785,297	733,116	716,778	714,929
Oklahoma	670,971	676,762	628,950	652,953	587,407	554,125	596,092
Oregon	75,562	70,824	67,045	78,643	83,002	70,973	80,249
Pennsylvania	784,691	694,639	643,952	676,721	625,667	609,953	626,770
Rhode Island	29,202	27,874	29,044	31,689	29,874	26,354	35,930
South Carolina	141,924	98,100	101,632	108,429	97,469	98,549	105,661
South Dakota	22,056	25,089	23,326	24,592	25,202	23,292	21,087
Tennessee	223,529	207,161	194,610	206,353	190,266	188,000	200,571
Texas	3,926,687	3,394,404	3,241,515	3,432,624	3,385,715	3,185,509	3,304,492
Utah	102,239	117,706	110,185	115,578	115,117	105,175	98,987
Vermont	4,383	4,370	4,359	4,868	4,998	5,019	5,181
Virginia	151,737	150,964	142,944	143,582	139,458	141,024	142,096
Washington	124,942	108,653	107,193	126,287	134,599	118,360	131,746
West Virginia	148,527	130,029	115,813	124,368	117,168	112,573	115,091
Wisconsin	324,611	312,007	299,099	305,076	308,365	278,848	280,184
Wyoming	69,056	90,923	80,871	85,423	82,172	75,029	81,704
U.S. Total	19,403,858	18,001,055	16,834,914	17,950,528	17,280,943	16,221,296	17,136,938

(1) Totals may not add due to independent rounding.

Source: U.S. Energy Information Administration, Natural Gas Annuals

Section XIII
Table 11

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Alabama	0.5	0.7	0.7	2.5	3.1	8.3	8.9	8.2	9.5	17.8	16.4
Alaska	--	--	--	--	--	--	--	--	--	--	--
Arkansas	885.3	896.9	869.4	902.7	926.3	979.2	1,204.7	1,159.1	1,158.0	1,165.2	1,276.1
California	10,109.2	10,137.2	9,937.4	9,707.4	9,430.9	9,289.3	9,109.6	8,977.6	8,844.7	8,703.7	8,904.3
Colorado	330.1	1,341.9	1,220.4	1,109.4	1,132.3	1,157.9	1,854.2	1,922.4	2,241.3	2,409.6	2,367.8
Florida	0.7	1.2	2.4	2.2	2.3	3.0	2.5	2.0	3.2	2.7	2.2
Illinois	219.9	226.6	231.9	228.6	225.9	210.5	230.0	252.4	232.3	218.5	165.5
Indiana	12.9	21.5	25.1	31.0	30.6	35.5	35.6	35.9	32.9	33.6	30.8
Kansas	14,477.9	14,329.6	14,013.0	13,715.9	13,384.4	14,116.5	15,701.9	15,672.7	16,204.6	17,470.9	19,191.2
Kentucky	1,372.0	1,370.7	1,342.1	1,323.4	1,318.4	1,306.4	1,294.5	1,279.6	1,255.4	1,238.8	1,218.4
Louisiana	23,353.7	23,847.3	26,542.9	28,378.3	28,847.5	31,280.8	34,271.8	36,600.1	42,205.1	44,809.3	51,156.6
Michigan	167.6	182.0	213.7	194.0	201.9	253.2	274.0	328.3	324.1	359.8	441.6
Mississippi	2,439.4	2,490.7	2,515.2	2,505.5	2,426.7	2,351.2	2,555.2	2,757.6	2,594.2	2,390.3	2,285.3
Montana	696.7	848.0	799.1	793.0	823.6	823.1	759.9	719.8	715.8	692.6	666.8
Nebraska	0.6	1.6	8.0	43.9	95.3	93.4	181.1	191.9	202.3	224.2	188.3
New Mexico	5,957.8	5,575.9	6,207.1	6,952.7	11,527.0	13,962.6	17,427.0	17,147.0	18,484.0	23,345.2	22,137.1
New York	64.5	67.2	66.3	64.4	66.4	68.3	70.6	69.0	75.3	84.8	932.9
North Dakota	--	--	--	6.3	69.6	97.8	169.0	163.1	279.2	395.3	74394
Ohio	607.9	626.0	649.0	655.3	685.4	727.5	751.9	770.5	805.5	849.0	896.9
Oklahoma	11,289.2	11,270.9	11,562.8	11,571.1	11,740.2	11,700.9	12,162.0	12,328.8	13,133.0	13,700.2	14,182.0
Pennsylvania	480.4	614.1	618.3	623.8	616.1	705.7	747.8	728.2	750.3	772.0	849.0
Texas	89,536.6	95,188.8	98,631.8	101,847.9	105,079.4	105,158.5	105,951.1	104,558.1	107,699.4	112,116.5	112,470.4
Utah	66.3	69.4	65.2	84.3	95.3	281.9	1,107.0	385.3	418.6	616.4	854.6
Virginia	--	--	--	--	9.9	27.9	28.4	31.5	34.6	35.4	37.3
West Virginia	1,771.1	1,727.7	1,705.9	1,641.7	1,662.4	1,651.1	1,645.0	1,598.6	1,556.4	1,553.3	1,552.5
Wyoming	1,185.3	2,082.4	2,161.9	2,183.1	2,327.6	2,308.5	2,724.8	2,839.6	3,178.7	3,218.4	3,438.7
Miscellaneous(1)	0.1	8.0	11.9	16.4	30.3	31.4	230.6	233.6	44.1	59.9	68.3
TOTAL U.S.(2)	165,025.8	173,925.1	179,401.7	184,584.7	192,758.9	198,631.6	210,298.8	210,560.9	222,482.5	236,483.2	245,230.1

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada, Annuals.

Section XIII
Table 11a

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Alabama	17.7	15.8	14.9	13.3	12.8	19.4	19.6	24.0	14.4	9.1	16.1
Alaska	--	57.7	107.1	921.8	1,634.3	1,690.7	1,831.4	1,985.3	2,946.9	3,635.3	5,252.3
Arkansas	1,380.8	1,415.1	1,451.8	1,469.0	1,643.7	1,792.6	2,100.1	2,269.0	2,599.6	2,811.3	2,715.1
California	8,917.8	8,546.8	8,795.9	9,054.2	9,121.4	8,865.7	9,053.7	8,832.4	8,474.4	7,723.8	7,316.3
Colorado	2,336.5	2,482.6	2,031.7	2,158.9	2,204.8	1,876.1	1,729.3	1,717.6	1,651.4	1,769.3	1,660.1
Florida	2.8	2.4	1.8	1.4	0.5	0.6	1.0	4.0	5.4	1.1	0.9
Illinois	169.6	174.2	172.2	163.3	158.2	168.6	179.5	209.7	236.5	258.6	297.9
Indiana	30.4	34.9	33.9	32.1	49.6	60.2	71.3	72.4	71.2	74.8	75.5
Kansas	20,124.0	19,872.9	19,513.7	19,085.8	18,567.2	17,994.2	17,278.1	16,596.4	15,923.3	15,283.7	14,511.2
Kentucky	1,208.7	1,153.8	1,137.6	1,120.7	1,108.9	1,085.2	1,094.4	1,092.2	1,017.0	954.0	923.3
Louisiana	54,812.4	59,528.9	63,041.9	65,670.1	71,544.1	75,365.0	79,076.3	82,811.2	83,684.1	86,290.0	88,015.6
Michigan	495.4	512.6	582.6	663.0	647.0	722.8	774.3	745.8	773.1	760.9	757.4
Mississippi	2,584.3	2,473.0	2,528.5	2,832.5	2,735.8	2,481.6	2,355.8	1,973.4	1,668.9	1,597.0	1,434.1
Montana	678.3	661.9	622.8	593.1	600.2	598.1	590.3	595.9	620.4	837.7	911.5
Nebraska	142.5	132.0	117.2	103.7	100.2	100.0	93.4	79.6	72.8	63.8	56.8
New Mexico	21,065.0	17,815.5	15,519.0	14,677.6	14,122.7	15,037.8	15,354.4	15,374.6	14,753.1	15,092.5	15,143.2
New York	95.9	105.9	95.7	127.6	131.2	132.3	133.5	135.7	120.9	121.1	124.1
North Dakota	1,118.4	1,200.0	1,144.8	943.4	962.7	1,119.6	1,110.6	1,121.2	1,024.5	882.1	866.8
Ohio	813.6	744.7	761.4	729.9	727.9	748.2	709.4	754.8	755.2	762.7	783.9
Oklahoma	15,124.2	16,560.9	17,217.4	17,256.7	18,259.0	19,138.8	19,757.2	20,357.4	21,122.2	19,403.8	18,368.3
Pennsylvania	865.3	1,046.3	1,186.0	1,162.5	1,175.1	1,214.5	1,243.6	1,257.0	1,350.6	1,392.2	1,345.0
Texas	114,420.9	119,821.5	118,840.4	119,187.9	118,854.8	117,809.4	118,855.1	120,616.8	123,609.3	125,415.1	119,001.1
Utah	1,052.3	1,257.4	1,517.9	2,019.1	1,786.4	1,638.3	1,519.4	1,438.8	1,372.2	1,226.5	1,156.6
Virginia	38.2	38.4	33.1	33.9	33.0	31.3	32.2	32.5	37.6	37.8	34.3
West Virginia	1,549.2	1,584.9	1,821.2	2,008.0	2,026.0	2,311.2	2,347.9	2,494.0	2,622.2	2,580.0	2,585.6
Wyoming	3,630.0	3,826.2	3,913.4	4,104.6	3,931.2	3,988.5	3,768.6	3,703.3	3,494.0	3,685.5	3,768.5
Miscellaneous(1)	87.4	105.2	122.7	139.6	150.0	160.2	171.2	174.0	211.6	238.3	228.4
TOTAL U.S.(2)	252,761.8	261,170.4	262,326.3	266,273.6	272,278.9	276,151.2	281,251.5	286,468.9	289,332.8	292,907.7	287,349.9

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(1) Includes Arizona, Florida, Iowa, Maryland, Missouri, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.

Source: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada, Annuals.

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Alabama	56.7	162.0	180.5	245.7	327.4	507.4	771.0	707.2	530.0	514.0	652.0
Alaska	5,202.1	31,130.8	31,365.4	31,455.4	31,642.6	31,866.6	32,050.7	31,929.6	32,243.0	32,045.0	32,259.0
Arkansas	2,632.8	2,580.7	2,430.1	2,455.9	2,269.4	2,113.4	1,993.3	1,728.3	1,660.0	1,681.0	1,703.0
California	6,870.9	6,299.8	5,729.5	5,328.9	5,199.8	5,194.6	5,484.0	5,342.0	4,737.0	4,947.0	5,022.0
Colorado	1,596.3	1,628.8	1,818.3	1,655.2	1,868.3	1,881.7	1,893.0	1,887.8	2,512.0	2,765.0	2,608.0
Florida	4.7	61.1	178.7	180.6	148.9	308.9	266.9	257.5	151.0	119.0	77.0
Illinois	337.8	415.4	499.0	545.4	380.5	399.4	380.8	376.9	(3)	(3)	(3)
Indiana	77.6	82.7	86.7	87.3	66.7	64.1	59.8	45.4	(3)	(3)	(3)
Kansas	14,125.1	13,325.1	12,535.2	11,938.7	11,722.4	11,704.7	12,661.2	11,950.6	11,457.0	10,992.0	10,243.0
Kentucky	920.5	977.8	956.3	938.1	864.9	844.0	812.6	771.5	451.0	545.0	468.0
Louisiana	85,056.6	82,956.7	78,625.8	74,971.3	69,151.6	64,052.4	61,309.4	57,501.8	57,010.0	55,725.0	50,042.0
Michigan	751.0	939.7	1,016.5	1,296.8	1,548.5	1,458.3	1,606.7	1,598.1	1,386.0	1,422.0	1,204.0
Mississippi	1,410.9	1,333.9	1,117.4	1,104.3	1,178.2	1,079.4	1,207.6	1,061.3	1,437.0	1,635.0	1,504.0
Montana	1,110.2	1,099.9	1,024.6	1,064.0	1,092.4	901.3	930.0	1,106.3	887.0	926.0	825.0
Nebraska	56.6	58.2	59.4	50.3	48.8	54.6	55.8	59.2	(3)	(3)	(3)
New Mexico	14,281.5	13,290.0	13,068.0	12,335.6	12,488.4	11,944.9	11,759.3	11,916.6	12,000.0	12,688.0	13,724.0
New York	120.5	126.0	139.1	139.2	136.8	165.5	215.8	236.0	165.0	193.0	211.0
North Dakota	648.6	567.4	503.7	441.6	448.2	432.7	416.8	405.9	361.0	374.0	439.0
Ohio	809.3	993.5	1,068.4	1,146.7	1,179.4	1,308.2	1,354.0	1,350.6	495.0	684.0	1,479.0
Oklahoma	17,593.2	16,954.3	15,712.8	14,492.0	14,098.7	13,390.3	13,083.0	12,435.3	13,889.0	14,417.0	13,816.0
Pennsylvania	1,303.9	1,377.5	1,395.9	1,406.9	1,494.4	1,492.1	1,682.5	1,651.9	769.0	899.0	1,515.0
Texas	112,392.6	106,353.0	101,472.1	95,042.0	84,936.5	78,540.7	71,036.9	64,651.4	56,422.0	55,583.0	53,021.0
Utah	1,090.8	1,065.2	982.0	1,022.1	1,024.7	1,031.4	917.4	829.9	877.0	925.0	948.0
Virginia	31.4	32.5	31.1	35.9	37.3	44.7	47.5	56.4	(3)	(3)	(3)
West Virginia	2,447.3	2,436.4	2,411.8	2,346.0	2,319.8	2,265.6	2,311.3	2,273.3	1,567.0	1,634.0	1,558.0
Wyoming	3,937.0	4,243.3	4,131.5	4,088.7	4,109.5	3,917.4	3,703.2	3,704.4	6,305.0	7,211.0	7,526.0
Miscellaneous(1)	242.7	355.0	266.0	270.0	165.9	168.1	189.4	191.0	102.0	109.0	153.0
TOTAL U.S.(2)	275,108.8	290,746.4	278,805.6	266,084.8	249,950.2	237,132.5	228,200.2	216,026.1	207,413.0	208,033.0	200,997.0

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
(2) Totals may not add due to independent rounding.
(3) Included in Miscellaneous.

Source: 1969-1976: API, AGA and CPA--Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the U. S. and Canada, Annuals.
1977-1979: DOE/EIA--U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

U.S. PROVED RESERVES OF NATURAL GAS BY STATE
(Billions of Cubic Feet)

State	1980	1981	1982	1983	1984	1985	1986	1987
Alabama	636.0	648.0	648.0	785.0	961.0	821.0	951.0	842.0
Alaska	33,382.0	33,037.0	34,990.0	34,283.0	34,476.0	33,847.0	32,664.0	33,225.0
Arkansas	1,774.0	1,801.0	1,958.0	2,069.0	2,227.0	2,019.0	1,992.0	1,997.0
California	5,414.0	5,617.0	5,552.0	5,781.0	5,554.0	4,325.0(4)	3,928.0(4)	3,740.0(4)
Colorado	2,922.0	2,961.0	3,314.0	3,148.0	2,943.0	2,881.0	3,027.0	2,942.0
Florida	84.0	69.0	64.0	49.0	65.0	55.0	49.0	49.0
Illinois	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Indiana	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Kansas	9,508.0	9,860.0	9,724.0	9,553.0	9,387.0	9,337.0	10,509.0	10,494.0
Kentucky	508.0	530.0	551.0	554.0	613.0	766.0	841.0	909.0
Louisiana	47,325.0	47,377.0	44,916.0	42,561.0	41,399.0	14,038.0(4)	12,930.0(4)	12,430.0(4)
Michigan	1,406.0	1,118.0	1,084.0	1,219.0	1,112.0	985.0	1,139.0	1,451.0
Mississippi	1,769.0	2,035.0	1,796.0	1,596.0	1,491.0	1,360.0	1,300.0	1,220.0
Montana	1,287.0	1,321.0	847.0	896.0	802.0	857.0	803.0	780.0
Nebraska	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
New Mexico	13,287.0	13,870.0	12,418.0	11,676.0	11,364.0	10,900.0	11,808.0	11,620.0
New York	208.0	264.0	229.0	295.0	389.0	369.0	457.0	410.0
North Dakota	537.0	581.0	629.0	600.0	566.0	569.0	541.0	508.0
Ohio	1,699.0	965.0	1,141.0	2,030.0	1,541.0	1,331.0	1,420.0	1,069.0
Oklahoma	13,138.0	14,699.0	16,207.0	16,211.0	16,126.0	16,040.0	16,685.0	16,711.0
Pennsylvania	951.0	1,264.0	1,429.0	1,882.0	1,575.0	1,617.0	1,560.0	1,647.0
Texas	50,287.0	50,469.0	49,757.0	50,052.0	49,883.0	41,775.0(4)	40,574.0(4)	38,711.0(4)
Utah	1,201.0	1,912.0	2,161.0	2,333.0	2,080.0	1,999.0	1,895.0	1,947.0
Virginia	(3)	(3)	122.0	175.0	216.0	235.0	253.0	248.0
West Virginia	2,422.0	1,834.0	2,148.0	2,194.0	2,136.0	2,058.0	2,148.0	2,242.0
Wyoming	9,100.0	9,307.0	9,758.0	10,227.0	10,482.0	10,617.0	9,756.0	10,023.0
Miscellaneous(1)	176.0	191.0	69.0	78.0	75.0	76.0	133.0	65.0
Federal offshore(5)						34,492.0	34,223.0	31,931.0
U.S. Total(2)	199,021.0	201,730.0	201,512.0	200,247.0	197,463.0	193,369.0	191,586.0	187,211.0

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(1) Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.

(2) Totals may not add due to independent rounding.

(3) Included in Miscellaneous.

(4) Includes offshore reserves in state waters only.

(5) Federal Offshore is a designation begun in the 1986 reported data. This number includes all state offshore reserves in federal waters, which accounts for the large decline in certain states beginning in 1985.

Source: Department of Energy, Energy Information Administration -- U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Annuals.

Section XIII
Table 12

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION
(Millions of Cubic Feet)

1960		1970		1980		1983(6)	
Company	Production	Company	Production	Company	Production	Company	Production
Exxon	574,328(1)	Exxon	2,003,120(1)	Exxon	1,231,145	Exxon	855,925
Standard of Ind.	573,050	Texaco	1,399,410(1)	Texaco	955,570(1)	Standard of Ind.	651,525
Phillips	501,853	Standard of Ind.	1,114,710	Standard of Ind.	820,520	Texaco	582,540(1)
Texaco	499,971(1)	Gulf	1,006,305	Mobil	711,750	Shell	539,105
Mobil	398,945(2)	Shell	930,020	Gulf	660,030(4)	Mobil	467,930
Shell	389,384	Mobil	813,585	Shell	649,700	Gulf	465,740(4)
Gulf	365,000(1)	Atlantic Richfield	728,905	Atlantic Richfield	447,855(1)	Atlantic Richfiel	453,159
Cities Service	323,564	Phillips	580,715	Standard of Calif.	444,935(1)	Standard of Calif.	421,968
Sun	273,694	Union	567,247	Union	425,225	Tenneco	357,149
Standard of Calif.	249,126	Standard of Calif.	537,645	Tenneco	406,789	Unocal (Union)(4)	298,351
Superiod	233,999(2)	Sun	525,965(3)	Sun	382,520(1)	Phillips	291,635
United Gas Corp.	204,000(3)	Getty	439,832	Phillips	344,195	Sun	270,830
Atlantic Richfield	186,040	Cities Service	368,614	Getty	312,171	Getty	266,774
Continental	161,477	Superior	338,836	Cities Service	296,125(4)	Occidental	239,440(4)
Sinclair	155,941	Continental	308,060	Conoco	283,970	Superior	234,732
Sunray-DX	151,663(3)	Tenneco	291,529	El Paso	283,000	DuPont	213,160(4)
Tidewater	139,517(3)	El Paso	219,730	Superior	283,000	El Paso	153,000
Union	124,963	Pennzoil-United	215,715	Pennzoil	213,825	Texas Oil & Gas	149,507
Skelly	124,493(3)	Marathon	171,597	Marathon	164,159	U.S. Steel	129,515
Pure	114,614(3)	Amerada Hess	160,892	Columbia	156,698(5)	Pennzoil	118,051
U.S. TOTAL	12,771,038	U.S. TOTAL	21,920,642	U.S. TOTAL	19,602,000	U.S. TOTAL	16,033,000

(1) Natural gas sales.
(2) Gross.
(3) Includes Canadian production.
(4) Volume before extraction of natural gas liquids.
(5) Includes synthetic gas.
(6) Reported on a "dry" gas basis unless otherwise noted.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1984, Discussion Paper #014R.

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION(1)
(Millions of Cubic Feet)

1984		1985		1986	
Company	Production	Company	Production	Company	Production
Texaco	964,726(2)	Chevron	765,770	Chevron	718,320
Exxon	907,025	Exxon	761,025	Exxon	700,435
Chevron(3)	903,302	Texaco	755,915(2)	Shell	653,715
Mobil(4)	750,440	Amoco (Std. of Ind.)	682,185	Amoco	631,615
Standard of Ind.	693,500	Mobil	603,345	Texaco	613,930
Shell	589,475	Shell	601,885	Mobil	546,770
Atlantic Richfield	501,462	Atlantic Richfield	434,355	ARCO	454,060
Tenneco	433,601	Tenneco	375,692	Tenneco	364,677
Phillips(5)	372,994	Phillips	319,740	USX (U.S. Steel)(10)	308,042
Unocal	304,666	Unocal	287,255	Phillips	299,300
Sun	286,160	Sun	239,440	Unocal	248,930
Occidental	248,565(6)	DuPont	230,680(6)	DuPont	248,000
DuPont	247,105(6)	Occidental	219,365(6)	Occidental	244,185
Texas Oil & Gas	177,173	Texas Oil and Gas	198,475	Sun	219,000
U.S. Steel(7)	150,937	Consolidated Oil and Gas	150,100	Burlington Northern(11)	145,000
Pennzoil	144,329	Pennzoil	138,438	Enron	127,276
Consolidated Natural Gas	126,600	U.S. Steel	137,712	Union Pacific	122,700
Columbia	125,462(8)	Union Pacific	115,194	Pennzoil	116,760
Union Pacific	121,363	Enron Corp.(9)	109,309	Mesa(12)	112,367
El Paso	107,000	El Paso	107,000	Consolidated Natural Gas	112,000
U.S. TOTAL	17,231,000	U.S. TOTAL	16,428,000	U.S. TOTAL	16,036,000

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(1) Reported on a "dry" gas basis unless otherwise noted.

(2) Sales. Texaco's figure also includes 100% of Getty Oil Company's estimated annualized production. (Texaco acquired Getty on March 1, 1984.)

(3) Standard Oil of California acquired the Gulf Corporation on June 15, 1984, and on July 1, 1984, Standard changed its name to Chevron. Chevron's figure includes 100% of Gulf's annualized production before the extraction of natural gas liquids.

(4) Mobil acquired Superior on September 23, 1984. Mobil's figure includes 100% of Superior's estimated annualized production.

(5) Phillips acquired Aminoil from R.J. Reynolds on October 26, 1984. Phillips' figure includes 100% of Aminoil's estimated annualized production.

(6) Volume before extraction of natural gas liquids.

(7) U.S. Steel acquired the U.S. assets of Husky Oil Ltd. on May 31, 1984. U.S. Steel's figure includes 100% of Husky's estimated annualized production of its U.S. assets.

(8) Includes synthetic gas and liquified petroleum gas.

(9) Formerly HNG/InterNorth, Inc. On June 1, 1985 InterNorth Inc. acquired the Houston Natural Gas Corporation and changed its name to reflect the acquisition. By April 1986 the corporation changed its name to Enron Corporation. Enron's figure includes Houston Natural Gas's 1985 full-year production. Enron's figure also includes cost and non-cost of service production.

(10) On February 11, 1986 a subsidiary of U.S. Steel merged with Texas Oil and Gas Corp. (TXO). On July 8, 1986, in recognition of its major diversification into oil and gas businesses, U.S. Steel changed its name to USX Corporation.

(11) On December 13, 1985 Southland Royalty became a wholly-owned subsidiary of Burlington Northern Inc. (BNI). BNI also is the parent company of El Paso Natural Gas Company.

(12) On June 30, 1986, Mesa acquired the assets of Pioneer Corporation. Mesa's figure includes 100 percent of Pioneer's estimated annualized production.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1986, Discussion paper #014R.

Section XIII
Table 12b

TWENTY LEADING COMPANIES
U.S. NATURAL GAS PRODUCTION(1)
(Millions of Cubic Feet)

1987	
Company	Production
Chevron	708,465
Mobil	656,635
Texaco	644,590
Exxon	619,770
Amoco	617,000
Shell	558,085
ARCO	464,280
Tenneco	368,377
Phillips	281,780(2)
Occidental	281,415(2)
USX	274,480
Unocal	271,925
Sun	230,315
DuPont	219,365(2)
Burlington Northern	151,000
Union Pacific	124,830
Enron	120,450
Pennzoil	115,052
Consolidated Natural Gas	109,562
Mesa	103,797
U.S. TOTAL	16,334,000

(1) Reported on a "dry" gas basis unless otherwise noted.
(2) Volume before extraction of natural gas liquids.

Source: API, Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1987, Discussion paper #014R.

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE
(In Dollars per Thousand Cubic Feet)

State	1967	1968	1969	1970	1971	1972	1973	1974	1975
Alabama	1.13	1.10	1.09	1.13	1.19	1.27	1.37	1.55	1.57
Alaska	1.51	1.52	1.52	1.52	1.53	1.55	1.57	1.58	1.63
Arizona	0.96	0.97	1.04	1.20	1.23	1.24	1.37	1.50	1.53
Arkansas	0.72	0.70	0.71	0.75	0.79	0.83	0.87	1.06	1.12
California	0.93	0.93	0.93	0.99	1.03	1.08	1.16	1.38	1.57
Colorado	0.66	0.68	0.69	0.72	0.75	0.78	0.83	1.00	1.16
Connecticut	1.83	1.81	1.82	1.91	2.07	2.09	2.25	2.79	3.29
Delaware	1.60	1.59	1.50	1.58	1.63	1.71	1.85	2.11	2.43
District of Columbia	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Florida	2.26	2.59	2.48	2.51	2.54	2.66	2.70	2.85	2.74
Georgia	1.03	1.02	1.02	1.05	1.13	1.26	1.30	1.40	1.50
Hawaii	NA	NA	NA	NA	NA	NA	NA	NA	NA
Idaho	1.29	1.36	1.37	1.39	1.49	1.51	1.52	1.80	2.18
Illinois	1.02	1.02	1.00	1.05	1.07	1.13	1.21	1.35	1.61
Indiana	0.98	0.94	0.94	1.01	1.08	1.14	1.20	1.28	1.45
Iowa	0.93	0.93	0.94	0.97	1.03	1.11	1.17	1.22	1.43
Kansas	0.59	0.63	0.64	0.68	0.72	0.74	0.75	0.90	1.03
Kentucky	0.84	0.79	0.80	0.83	0.88	0.93	0.99	1.10	1.23
Louisiana	0.75	0.75	0.75	0.77	0.84	0.91	0.97	1.12	1.37
Maine	1.96(2)	2.05(2)	1.97(2)	1.99(2)	2.05(2)	2.14(2)	2.17(2)	2.38(2)	2.65(2)
Maryland	1.44(3)	1.42(3)	1.42(3)	1.45(3)	1.51(3)	1.65(3)	1.68(3)	0.50(3)	2.33(3)
Massachusetts	1.88	1.86	1.86	1.92	2.12	2.29	2.40	2.71	3.15
Michigan	0.98	0.98	0.98	1.01	1.06	1.10	1.18	1.37	1.62
Minnesota	1.03	1.03	1.07	1.10	1.18	1.23	1.30	1.41	1.57
Mississippi	0.88	0.97	0.88	0.88	0.94	1.08	1.09	1.23	1.41
Missouri	0.84	0.86	0.89	0.96	1.02	1.10	1.16	1.27	1.49
Montana	0.80	0.82	0.88	0.91	0.93	0.97	1.09	1.12	1.30
Nebraska	0.79	0.80	0.83	0.85	0.92	0.99	1.04	1.14	1.28
Nevada	1.42	1.51	1.49	1.51	1.51	1.52	1.54	1.72	1.95
New Hampshire	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
New Jersey	1.91	1.91	1.85	1.89	1.95	2.02	2.08	2.25	2.69
New Mexico	0.91	0.89	0.91	0.93	0.95	0.97	1.00	1.24	1.33
New York	1.42	1.38	1.37	1.40	1.50	1.62	1.74	2.00	2.54
North Carolina	1.31	1.29	1.25	1.30	1.34	1.41	1.51	1.69	2.02
North Dakota	0.94	0.93	0.95	1.02	1.10	1.13	1.14	1.19	1.51
Ohio	0.86	0.85	0.87	0.90	0.98	1.05	1.11	1.24	1.50
Oklahoma	0.78	0.77	0.82	0.84	0.87	0.90	0.92	1.05	1.22
Oregon	1.57	1.54	1.49	1.51	1.60	1.68	1.76	2.00	2.20
Pennsylvania	1.15	1.15	1.18	1.24	1.28	1.36	1.48	1.66	1.93
Rhode Island	1.81	1.78	1.78	1.83	1.93	2.05	2.37	2.55	3.09
South Carolina	1.40	1.32	1.33	1.35	1.47	1.62	1.65	1.97	2.13
South Dakota	0.99	0.99	1.01	1.04	1.10	1.13	1.19	1.29	1.40
Tennessee	0.90	0.88	0.89	0.91	0.98	1.02	1.08	1.17	1.29
Texas	0.87	0.87	0.90	0.92	0.99	1.01	1.04	1.17	1.52
Utah	0.68	0.74	0.83	0.85	0.87	0.90	0.99	1.07	1.22
Vermont	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Virginia	1.46	1.44	1.43	1.49	1.52	1.60	1.68	1.87	2.24
Washington	1.48	1.43	1.36	1.40	1.43	1.47	1.55	1.77	2.27
West Virginia	0.84	0.87	0.88	0.89	0.94	0.96	0.97	1.10	1.45
Wisconsin	1.02	1.10	1.16	1.25	1.26	1.34	1.43	1.50	1.75
Wyoming	0.66	0.67	0.68	0.68	0.71	0.74	0.77	0.85	1.02
TOTAL	1.04	1.04	1.05	1.09	1.15	1.21	1.29	1.43	1.71

NA Not Available
(1) Included in Maryland averages.
(2) Averages include New Hampshire and Vermont.
(3) Averages include the District of Columbia.
(4) Included in Maine averages.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE

(In Dollars per Thousand of Cubic Feet)

State	1976	1977	1978	1979	1980	1981	1982	1983	1984
Alabama	1.99	2.31	2.71	3.65	4.04	4.77	5.58	6.22	6.26
Alaska	1.65	1.71	1.76	1.71	1.73	1.95	1.79	2.33	2.49
Arizona	2.12	2.61	3.07	3.50	4.05	4.63	5.92	6.63	7.16
Arkansas	1.23	1.98	1.96	1.57	2.47	3.04	3.82	4.40	4.37
California	1.77	1.89	1.99	2.47	3.51	3.74	4.43	5.41	5.84
Colorado	1.27	1.62	1.94	2.48	3.23	4.17	4.89	5.51	5.24
Connecticut	3.41	4.34	4.47	4.74	5.84	6.85	8.51	9.70	8.80
Delaware	2.61	3.25	4.06	4.03	4.30	5.53	6.04	6.59	6.67
District of Columbia	(1)	(1)	(1)	(1)	4.57	5.50	6.64	8.10	8.05
Florida	2.81	3.53	3.54	3.70	4.80	5.31	6.59	6.85	7.18
Georgia	1.69	1.97	2.33	2.88	3.67	4.34	5.33	6.10	6.41
Hawaii	NA	NA	NA	NA	12.99	15.57	15.70	16.46	17.36
Idaho	2.24	2.86	3.41	3.73	4.97	5.57	6.92	7.38	6.89
Illinois	1.90	2.21	2.50	3.01	3.61	4.05	4.73	5.46	5.37
Indiana	1.69	2.02	2.17	2.65	3.15	3.60	4.38	5.49	5.69
Iowa	1.61	1.93	2.25	2.68	3.19	3.89	4.69	5.52	5.56
Kansas	1.48	1.73	1.77	1.95	2.36	3.03	4.06	4.68	4.49
Kentucky	1.32	1.79	1.94	2.35	3.03	3.49	4.46	5.30	5.20
Louisiana	1.57	1.97	2.47	2.71	3.40	4.15	5.32	6.12	5.96
Maine	2.68(2)	3.62(2)	3.57(2)	4.10(2)	6.34	7.45	8.63	9.82	9.58
Maryland	2.57(3)	3.18(3)	3.40(3)	3.76(3)	4.46	5.07	6.12	7.42	7.44
Massachusetts	3.64	3.95	4.17	4.55	5.42	6.37	7.54	8.32	7.83
Michigan	1.90	2.22	2.31	2.64	3.19	3.84	4.79	5.84	5.97
Minnesota	1.74	2.13	2.41	2.86	3.22	4.09	4.96	5.90	6.00
Mississippi	1.71	2.11	2.40	2.83	3.47	3.99	4.93	5.88	5.52
Missouri	1.70	2.18	2.29	2.75	3.28	4.02	5.20	6.12	5.85
Montana	1.36	1.82	1.89	2.21	3.05	3.75	4.45	4.62	4.86
Nebraska	1.37	1.80	1.97	2.30	2.72	3.45	4.15	4.95	5.09
Nevada	2.04	2.78	2.80	2.83	4.06	4.84	5.56	6.81	6.95
New Hampshire	(4)	(4)	(4)	(4)	4.66	5.68	6.85	7.47	7.02
New Jersey	3.14	3.42	3.53	4.30	5.06	5.87	7.03	7.43	7.30
New Mexico	1.36	2.11	2.50	2.73	3.32	3.86	4.94	5.50	5.90
New York	2.87	3.28	3.68	4.12	4.95	5.50	6.51	7.87	7.64
North Carolina	2.13	2.81	3.00	3.52	4.11	5.17	5.73	6.65	6.68
North Dakota	1.79	2.11	2.33	2.88	3.85	4.28	4.61	5.56	6.38
Ohio	1.77	2.21	2.43	2.81	3.54	3.97	4.96	6.08	6.07
Oklahoma	1.50	1.78	1.93	2.20	2.46	2.94	3.53	4.33	4.56
Oregon	2.68	3.43	3.83	4.12	5.60	6.06	6.92	7.23	7.18
Pennsylvania	2.14	2.51	2.63	3.19	3.80	4.51	5.42	6.44	6.56
Rhode Island	3.36	4.23	4.18	3.67	5.69	6.61	7.95	8.66	7.50
South Carolina	2.29	2.87	3.00	3.50	4.19	4.90	5.51	6.38	6.62
South Dakota	1.50	1.83	2.10	2.61	3.13	3.91	4.71	5.59	6.16
Tennessee	1.61	2.09	2.14	2.37	2.89	3.44	4.32	5.26	5.04
Texas	1.99	2.39	2.73	3.21	3.40	4.20	5.21	5.55	5.82
Utah	1.38	1.64	1.93	2.22	2.74	3.23	3.41	4.26	5.68
Vermont	(4)	(4)	(4)	(4)	6.22	7.00	7.24	6.79	6.30
Virginia	2.54	3.03	3.27	3.71	4.26	4.66	6.02	7.03	6.99
Washington	2.70	3.12	3.48	3.95	5.31	6.02	6.87	6.87	6.84
West Virginia	1.67	2.55	2.61	2.93	3.59	4.24	5.20	6.00	6.12
Wisconsin	2.11	2.50	2.68	3.06	3.83	4.77	5.64	6.48	6.51
Wyoming	1.18	1.59	1.91	2.51	2.81	3.51	4.53	5.13	5.84
TOTAL	1.98	2.35	2.56	2.98	3.68	4.29	5.17	6.06	6.12

NA Not Available
(1) Included with Maryland averages.
(2) Averages include New Hampshire and Vermont.
(3) Averages include the District of Columbia.
(4) Included in Maine averages.

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals.

AVERAGE PRICE OF NATURAL GAS DELIVERED TO RESIDENTIAL CONSUMERS BY STATE
(In Dollars per Thousand Cubic Feet)

State	1985	1986	1987
Alabama	6.41	6.52	6.64
Alaska	2.81	3.25	3.21
Arizona	7.00	6.28	6.11
Arkansas	4.43	4.83	4.63
California	5.72	5.14	5.26
Colorado	5.10	5.01	4.74
Connecticut	9.15	8.83	8.21
Delaware	7.06	7.09	6.32
District of Columbia	7.91	7.52	7.09
Florida	7.46	7.20	7.48
Georgia	6.60	6.63	6.34
Hawaii	18.12	16.09	15.90
Idaho	6.89	6.02	5.50
Illinois	5.55	5.07	4.81
Indiana	5.54	5.52	4.95
Iowa	5.39	5.12	4.75
Kansas	4.12	3.89	4.09
Kentucky	5.31	4.93	4.53
Louisiana	5.67	5.77	5.56
Maine	9.07	8.51	8.04
Maryland	7.25	6.88	6.37
Massachusetts	7.83	7.41	6.64
Michigan	6.29	5.74	5.46
Minnesota	5.80	5.28	4.58
Mississippi	5.46	5.59	6.10
Missouri	5.49	5.03	4.76
Montana	4.81	4.45	4.41
Nebraska	5.01	4.59	4.36
Nevada	7.04	5.96	5.31
New Hampshire	7.15	7.07	6.50
New Jersey	7.49	7.35	6.60
New Mexico	6.08	5.72	4.98
New York	7.74	7.46	6.88
North Carolina	6.60	6.62	6.66
North Dakota	5.59	5.29	5.47
Ohio	6.04	5.80	5.35
Oklahoma	4.58	5.01	4.63
Oregon	6.93	6.61	6.62
Pennsylvania	6.72	6.39	6.03
Rhode Island	7.87	7.46	6.81
South Carolina	6.62	6.54	6.59
South Dakota	5.75	5.26	4.87
Tennessee	5.12	4.97	4.68
Texas	5.77	5.31	5.20
Utah	4.86	4.64	4.97
Vermont	6.28	6.28	6.23
Virginia	7.02	6.49	5.86
Washington	6.60	5.93	5.42
West Virginia	6.39	6.34	5.98
Wisconsin	6.47	6.20	6.00
Wyoming	5.17	4.93	4.70
TOTAL	6.12	5.83	5.54

Source: U.S. Department of Energy, Energy Information Administration, Natural Gas Annual.

HISTORICAL U.S. GROSS AND MARKETED PRODUCTION OF NATURAL GAS: 1935-1946
(Millions of Cubic Feet)

Year	Gross Production	Repressuring	Vented and Flared(1)	Marketed Production(2)
1935	2,498,005	90,290	479,826	1,927,889
1936	2,633,835	73,507	392,528	2,178,800
1937	3,032,410	84,925	526,159	2,421,326
1938	3,061,200	101,551	649,106	2,310,543
1939	3,333,500	171,401	677,311	2,484,788
1940	3,694,100	362,916	655,967	2,675,217
1941	4,103,500	644,379	630,212	2,828,909
1942	4,453,900	752,619	626,782	3,074,499
1943	5,160,650	824,803	902,115	3,433,642
1944	5,614,220	882,979	1,010,285	3,720,956
1945	5,902,180	1,061,951	896,208	3,944,021
1946	6,190,200	1,038,242	1,102,033	4,049,925

(1) Partly estimated; includes direct losses on producing properties and residue blown to the air.
(2) Marketed production equals gross production, less amounts used for repressuring, vented and flared.

Source: U.S. Department of Interior, Bureau of Mines, Mineral Industry Surveys, "Natural Gas" Annuals.

SECTION XIV. OPEC

Table 1. OPEC Crude Oil Reserves

Table 2 OPEC Crude Oil Production

Table 3. U.S. Total Petroleum Imports From OPEC Nations

Table 4. U.S. Crude Oil Imports From OPEC Nations

Table 5. OPEC Refinery Capacity

Table 6. OPEC's Values of Petroleum Exports

Table 7. OPEC Marketed Production of Natural Gas

Section XIV
Table 1

OPEC CRUDE OIL RESERVES
ANNUALLY AS OF JANUARY 1
(Millions of Barrels)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC
1960	50,000	62,000	6,500	35,000	25,000	18,000	-	-	-	-	-	-	-	-	196,500
1961	50,000	62,000	6,000	35,000	27,000	18,500	2,500	-	-	-	-	-	-	-	201,000
1962	52,000	62,000	6,000	35,000	26,500	17,550	2,750	3,000	9,500	-	-	-	-	-	214,300
1963	52,000	63,000	7,500	37,000	26,000	17,000	3,000	4,500	10,000	-	-	-	-	-	220,000
1964	60,000	63,500	10,000	37,000	25,500	17,000	2,950	7,000	10,000	-	-	-	-	-	232,950
1965	60,500	63,000	12,500	38,000	25,000	17,000	3,500	9,000	10,000	-	-	-	-	-	238,500
1966	60,000	62,500	12,400	40,000	25,000	17,250	3,000	10,000	9,500	-	-	-	-	-	239,650
1967	66,000	68,700	13,000	44,200	24,000	17,400	4,000	20,000	9,100	12,500	-	-	-	-	278,900
1968	74,700	70,000	13,500	43,800	23,500	17,000	3,750	29,200	9,000	15,000	-	-	-	-	299,450
1969	77,000	69,000	15,000	54,000	28,000	15,500	3,875	30,000	8,850	18,000	7,000	-	-	-	326,225
1970	140,000	68,000	13,000	55,000	27,500	14,750	5,500	35,000	9,000	16,000	8,000	-	-	-	391,750
1971	128,500	67,100	25,700	70,000	32,000	14,000	4,300	29,200	10,000	11,800	30,000(10)	9,300	-	-	431,900
1972	145,300	66,023	24,350	55,500	35,900	13,900	6,000	25,000	10,400	18,948	12,250	11,680	-	-	425,251
1973	138,000	64,900	16,000	65,000	29,000	13,700	7,000	30,400	10,005	20,768	47,000	15,000	5,750	1,100	463,623
1974	132,000	64,000	17,500	60,000	31,500	14,000	6,500	25,500	10,500	25,500	7,640	20,000	5,675	1,500	421,815
1975	164,500	72,800	17,300	66,000	35,000	15,000	6,000	26,600	15,000	33,920	7,700	20,900	2,500	1,750	484,970
1976	148,600	68,000	6,400	64,500	34,300	17,700	5,850	26,100	14,000	32,200	7,370	20,200	2,450	2,200	449,879
1977	151,400	67,400	6,300	63,000	34,000	15,270	5,700	25,500	10,500	31,200	6,800	19,500	1,700	2,125	440,395
1978	150,000	67,000	6,200	62,000	34,500	18,200	5,600	25,000	10,000	32,425	6,600	18,700	1,640	2,050	439,915
1979	165,700	66,200	6,480	59,000	32,100	18,000	4,000	24,300	10,200	31,316	6,300	18,200	1,170	1,970	444,936
1980	163,350	65,400	6,260	58,000	31,000	17,870	3,760	23,500	9,600	29,411	8,440	17,400	1,100	500	435,591
1981	165,000	64,900	6,060	57,500	30,000	17,950	3,585	23,000	9,500	30,410	8,200	16,700	1,100	450	434,355
1982	164,600	64,480	6,500	57,000	29,700	20,300	3,434	22,600	9,800	32,176	8,080	16,500	850	480	436,500
1983	162,400	64,230	5,840	55,308	41,000	21,500	3,425	21,500	9,550	32,354	9,440	16,750	1,400	460	445,157
1984	166,000	63,900	5,695	51,000	43,000	24,850	3,330	21,370	9,100	32,240	9,220	16,550	1,675	490	448,320
1985	169,000	90,000	5,420	48,500	44,500	25,845	3,350	21,100	8,650	32,390	9,000	16,650	1,400	510	476,215
1986	168,800	89,774	5,380	47,876	44,110	25,591	3,300	21,300	8,500	32,890	8,820	16,600	1,650	520	475,110
1987	166,574	91,916	5,212	48,800	47,100	25,500	3,154	21,300	8,300	33,050	8,800	16,000	1,672	645	478,023
1988	166,980	91,920	5,210	92,850	100,000	56,300	3,150	21,000	8,400	97,705	8,500	15,980	1,615	645	670,250
1989	169,970	91,920	5,210	92,850	100,000	58,084	3,150	22,000	8,250	97,705	8,400	16,000	1,350	720	675,609

(1) Original member 1960.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on a 50-50 basis.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. Figures reflect only Abu Dhabi reserves until 1974 when membership was transferred to the United Arab Emirates which includes Dubai and Sharjah.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Government estimate

SOURCE:" Oil and Gas Journal, "Worldwide Report" issue

Section XIV
Table 2

OPEC CRUDE OIL PRODUCTION
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC
1960	1,247	1,624	138	1,054	967	2,846	-	-	-	-	-	-	-	-	7,874
1961	1,393	1,644	179	1,183	1,002	2,920	176	-	-	-	-	-	-	-	8,497
1962	1,521	1,834	244	1,320	1,005	3,200	186	184	460	-	-	-	-	-	9,954
1963	1,629	1,933	314	1,474	1,159	3,248	192	464	452	-	-	-	-	-	10,865
1964	1,716	2,117	359	1,691	1,262	3,393	213	862	469	-	-	-	-	-	12,082
1965	2,025	2,170	362	1,886	1,322	3,473	231	1,220	488	-	-	-	-	-	13,177
1966	2,393	2,275	420	2,113	1,385	3,371	290	1,507	463	-	-	-	-	-	14,217
1967	2,598	2,292	415	2,596	1,228	3,542	324	1,744	507	384	-	-	-	-	15,631
1968	2,830	2,421	428	2,840	1,499	3,605	340	2,599	601	497	-	-	-	-	17,660
1969	2,993	2,575	447	3,375	1,521	3,649	383	3,111	742	599	946	-	-	-	20,341
1970	3,549	2,735	504	3,829	1,558	3,708	363	3,313	854	691	1,030	-	-	-	22,134
1971	4,498	2,925	545	4,553	1,710	3,549	429	2,761	892	934	766	1,530	-	-	25,092
1972	5,733	2,999	566	5,024	1,447	3,220	482	2,239	1,081	1,050	1,052	1,818	-	-	26,711
1973	7,335	2,759	523	5,861	2,018	3,366	570	2,175	1,338	1,533	1,097	2,054	209	151	30,989
1974	8,210	2,276	543	6,022	1,975	2,976	519	1,521	1,375	1,689	1,009	2,256	174	202	30,747
1975	6,827	1,838	496	5,350	2,262	2,346	437	1,510	1,307	1,694	961	1,786	161	225	27,200
1976	8,344	1,913	469	5,924	2,281	2,294	487	1,924	1,504	1,891	1,049	2,066	188	224	30,558
1977	9,014	1,783	372	5,699	2,493	2,238	445	2,064	1,685	1,999	1,123	2,097	183	222	31,417
1978	8,530	1,865	466	5,207	2,629	2,166	484	1,993	1,637	1,832	1,225	1,910	202	225	30,371
1979	9,251	2,213	568	3,168	3,477	2,356	508	2,092	1,591	1,831	1,137	2,302	214	203	30,911
1980	9,631	1,389	544	1,662	2,514	2,165	471	1,830	1,576	1,702	1,020	2,058	204	175	26,941
1981	9,625	947	370	1,381	993	2,108	405	1,137	1,604	1,500	803	1,445	211	151	22,680
1982	6,327	663	317	2,282	972	1,893	328	1,183	1,314	1,248	701	1,298	211	154	18,891
1983	4,867	881	390	2,492	922	1,781	295	1,076	1,385	1,119	699	1,241	236	157	17,541
1984	4,444	912	410	2,187	1,203	1,813	399	1,073	1,466	1,097	638	1,393	253	152	17,440
1985	3,290	862	355	2,258	1,437	1,621	302	1,069	1,235	1,146	645	1,464	280	153	16,117
1986	4,935	1,344	332	1,929	1,746	1,576	342	1,137	1,264	1,331	671	1,461	289	180	18,537
1987	4,067	1,034	391	2,451	2,076	1,572	308	972	1,191	1,454	635	1,286	167	156	17,760

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(1) Original member 1960.
(2) Saudi Arabia and Kuwait share the production from the Neutral Zone on a 50-50 basis.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. Figures reflect only Abu Dhabi production until 1974 when membership was transferred to the United Arab Emirates which includes Dubai and Sharjah.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.

Source: U.S. Energy Information Administration
1979-1987: CIA, International Energy Statistical Review

Section XIV
Table 3

U.S. TOTAL PETROLEUM IMPORTS FROM OPEC NATIONS
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC	Total U.S. Petroleum Imports
1960	79	146	45	36	17	832	-	-	-	8	-	-	-	-	1,155	1,815
1961	69	130	53	60	25	800	36	-	-	-	-	-	-	-	1,173	1,917
1962	73	120	43	49	2	907	27	19	67	-	-	-	-	-	1,307	2,082
1963	86	89	44	62	1	899	17	19	59	-	-	-	-	-	1,276	2,123
1964	106	69	48	66	-	931	20	39	63	-	-	-	-	-	1,342	2,258
1965	144	60	27	79	16	994	13	41	61	-	-	-	-	-	1,435	2,468
1966	135	31	19	89	26	1,021	1	69	50	-	-	-	-	-	1,441	2,573
1967	86	23	11	71	5	935	-	42	62	5	-	-	-	-	1,240	2,537
1968	60	48	29	61	-	888	-	114	73	15	-	-	-	-	1,288	2,840
1969	42	39	43	46	-	876	1	135	89	14	2	-	-	-	1,287	3,166
1970	42	36	-	38	-	989	-	47	70	63	8	-	-	-	1,293	3,419
1971	127	36	-	112	11	1,019	-	57	111	80	15	103	-	-	1,671	3,925
1972	190	45	-	142	4	960	3	123	164	73	92	251	-	-	2,047	4,741
1973	486	47	-	223	4	1,135	7	164	213	71	135	459	48	-	2,992	6,256
1974	461	5	-	469	-	979	17	4	300	74	190	713	42	23	3,277	6,112
1975	715	15	-	280	3	698	18	232	388	117	282	762	57	27	3,594	6,025
1976	1,230	5	-	298	26	699	24	453	539	254	432	1,025	51	28	5,064	7,295
1977	1,380	48	-	535	73	690	67	723	541	335	559	1,143	57	42	6,193	8,807
1978	1,144	6	-	555	62	645	64	654	573	385	649	919	54	41	5,751	8,363
1979	1,356	8	-	304	88	690	31	658	420	281	636	1,080	42	42	5,636	8,456
1980	1,261	25	-	9	28	481	22	554	348	172	488	857	27	26	4,298	6,909
1981	1,129	-	-	-	(10)	406	7	319	366	81	311	620	48	35	3,324	5,996
1982	552	5	-	35	3	412	7	26	248	92	170	514	42	40	2,145	5,113
1983	337	14	-	48	10	422	-	-	338	30	240	302	61	59	1,863	5,051
1984	325	36	-	10	12	548	5	1	343	117	323	216	55	58	2,049	5,437
1985	168	21	-	27	46	605	-	4	314	45	187	293	67	52	1,830	5,067
1986	685	68	-	19	81	793	13	-	318	44	271	440	77	26	2,836	6,224
1987	751	84	-	98	83	804	-	-	285	61	295	535	29	35	3,061	6,678
1988	1,064	92	9	-	345	794	-	-	205	29	300	618	47	16	3,520	7,402

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(1) Original member 1960.
(2) In 1969, Saudi Arabia and Kuwait agreed to a boundary for administration of the Neutral Zone which had been in dispute until that time. Natural resources from the area were to be shared equally.
(3) Joined in 1961.
(4) Joined in 1962.
(5) Abu Dhabi joined in 1967. In 1972, Abu Dhabi together with Dubai, Sharjah and several other sheikdoms formed the United Arab Emirates. Abu Dhabi's membership in OPEC was transferred to the other members of the U.A.E. in 1974.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Less than 500 barrels per day.

Source: U.S. Energy Information Administration. P.A.D. District Supply/Disposition Annual
1981-1988: U.S. Energy Information Administration, Petroleum Supply Annuals

U.S. CRUDE OIL IMPORTS FROM OPEC NATIONS
(Thousands of barrels per day)

Year	Saudi Arabia (1)	Kuwait (1)	Neutral Zone (2)	Iran (1)	Iraq (1)	Venezuela (1)	Qatar (3)	Libya (4)	Indonesia (4)	United Arab Emirates (5)	Algeria (6)	Nigeria (7)	Ecuador (8)	Gabon (9)	Total OPEC	Total U.S. Crude Oil Imports
1960	77	130	45	36	17	472	-	-	-	-	-	-	-	-	777	1,015
1961	62	121	53	60	20	427	10	-	-	-	-	-	-	-	753	1,045
1962	67	112	43	49	2	463	26	18	67	-	-	-	-	-	847	1,126
1963	79	81	44	62	1	478	16	19	59	-	-	-	-	-	839	1,131
1964	97	64	48	66	-	476	20	39	63	-	-	-	-	-	873	1,198
1965	132	55	27	78	16	432	12	41	61	-	-	-	-	-	854	1,238
1966	126	26	19	84	26	404	1	69	50	-	-	-	-	-	805	1,225
1967	81	19	11	65	5	359	-	42	62	5	-	-	-	-	649	1,128
1968	52	43	29	58	-	344	-	114	73	15	-	-	-	-	728	1,290
1969	35	34	43	42	-	306	1	134	89	14	1	-	-	-	699	1,490
1970	40	33	-	33	-	268	-	47	70	63	6	-	-	-	560	1,324
1971	115	29	-	106	11	303	-	53	110	80	13	95	-	-	915	1,681
1972	174	36	-	136	4	255	3	109	163	73	87	243	-	-	1,283	2,216
1973	462	42	-	217	4	344	7	133	200	71	119	448	47	-	2,094	3,244
1974	438	5	-	463	-	319	17	4	284	69	180	697	42	23	2,541	3,477
1975	701	4	-	278	2	395	18	223	379	117	264	746	57	27	3,211	4,105
1976	1,222	1	-	298	26	241	24	444	536	255	408	1,014	51	26	4,546	5,287
1977	1,369	42	-	525	76	249	67	696	502	331	538	1,123	54	35	5,607	6,568
1978	1,142	5	-	554	62	181	64	638	533	385	634	910	38	38	5,184	6,356
1979	1,347	5	-	297	88	293	31	642	380	281	608	1,069	30	42	5,113	6,519
1980	1,250	27	-	8	28	156	22	548	314	172	456	841	17	25	3,864	5,263
1981	1,112	-	-	-	-	147	7	317	318	77	261	611	38	35	2,922	4,396
1982	530	2	-	35	3	155	7	23	226	81	90	510	32	40	1,734	3,488
1983	321	7	-	48	10	164	-	-	315	18	176	301	56	59	1,477	3,329
1984	309	24	-	10	12	253	4	-	304	90	194	207	47	57	1,511	3,426
1985	132	4	-	27	46	306	-	-	292	35	84	280	56	51	1,312	3,201
1986	618	28	-	19	81	416	12	-	297	38	78	437	64	25	2,113	4,178
1987	642	70	-	98	82	488	-	-	262	56	115	529	23	35	2,400	4,674
1988	902	80	9	-	343	439	-	-	186	23	58	607	33	15	2,696	5,107

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(1) Original member 1960.
(2) In 1969, Saudi Arabia and Kuwait agreed to a boundary for administration of the Neutral Zone which had been in dispute until that time. Natural resources from the area were to be shared equally.
(3) Joined in 1961.
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(5) Abu Dhabi joined in 1967. In 1972, Abu Dhabi together with Dubai, Sharjah and several other sheikdoms formed the United Arab Emirates. Abu Dhabi's membership in OPEC was transferred to the other members of the U.A.E. in 1974.
(6) Joined in 1969.
(7) Joined in 1971.
(8) Joined in 1973.
(9) Joined as an associate member in 1973 and became a full member in 1975.
(10) Includes crude oil imported into the Strategic Petroleum Reserve.

Source: U.S. Energy Information Administration, Petroleum Statement, Annual and December issues
1981-1988: U.S. Energy Information Administration, Petroleum Supply Annuals

Section XIV
Table 5

OPEC REFINERY CAPACITY
(Thousands of Barrels per Day)

Country	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Algeria	43.7	57.5	57.5	57.5	57.5	57.5	57.5	115.8	115.8	115.8	115.8	115.8
Ecuador	18.2	10.9	19.4	34.5	34.5	34.5	35.5	35.5	35.5	43.9	43.9	43.9
Gabon	--	--	11.9	11.9	14.0	16.0	17.0	17.0	17.0	17.0	20.0	44.0
Indonesia	236.9	241.4	251.2	251.2	256.0	283.5	361.3	361.3	361.3	361.3	361.3	473.4
Iran	466.5	524.2	524.2	594.0	594.0	594.0	605.0	605.0	660.0	690.0	810.0	810.0
Iraq	81.7	81.7	97.7	102.7	102.7	115.7	115.7	115.7	183.5	253.5	253.5	253.5
Kuwait	342.0	342.0	342.0	437.0	437.0	437.0	437.0	484.5	541.5	541.5	609.0	609.0
Libya	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	63.0	63.0	63.0
Nigeria	30.3	30.3	40.0	40.0	40.0	52.1	54.0	54.0	54.0	54.0	54.0	54.0
Qatar	.6	.7	.7	.7	.7	.7	.7	.7	.7	.7	9.7	9.7
Saudi Arabia	302.5	335.0	335.0	347.0	347.0	676.0	676.0	676.0	676.0	676.0	703.0	703.0
United Arab Emirates	--	--	--	--	--	--	--	--	--	--	--	15.0
Venezuela	1,119.8	1,134.5	1,216.8	1,222.2	1,258.0	1,289.4	1,294.9	1,473.9	1,473.9	1,444.9	1,444.9	1,444.9
TOTAL OPEC	2,651.2	2,767.2	2,905.4	3,107.7	3,150.4	3,565.4	3,663.6	3,948.4	4,128.2	4,290.6	4,488.1	4,637.7

Source: OPEC Annual Statistical Bulletin

Section XIV
Table 5a

OPEC REFINERY CAPACITY
(Thousands of Barrels per Day)

Country	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Algeria	115.8	115.8	135.1	471.2	471.2	471.2	471.2	471.2	471.2	471.2	471.2
Ecuador	99.5	99.5	94.5	94.5	94.5	94.5	94.6	94.6	94.6	94.6	139.0
Gabon	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	21.0	21.0	21.0
Indonesia	473.4	473.4	473.4	473.4	473.4	473.4	837.0	837.0	837.0	738.7	738.7
Iran	1,050.0	1,080.0	1,080.0	1,320.0	1,320.0	670.0	670.0	615.0	615.0	615.0	615.0
Iraq	253.5	295.5	305.5	305.5	305.5	215.5	365.5	365.5	365.5	365.5	365.5
Kuwait	594.0	594.0	594.0	594.0	594.0	594.0	614.0	614.0	614.0	720.0	720.0
Libya	117.0	117.0	117.0	117.0	117.0	117.0	117.0	315.0	333.0	342.0	342.0
Nigeria	54.0	144.0	144.0	234.0	234.0	234.0	234.0	234.0	234.0	243.0	243.0
Qatar	9.7	9.7	10.5	10.5	10.5	12.2	63.0	63.0	63.0	63.0	63.0
Saudi Arabia	703.0	758.0	758.0	645.0	765.0	765.0	935.0	1,190.0	1,440.0	1,490.0	1,490.0
United Arab Emirates	13.5	13.5	13.5	13.5	121.5	121.5	175.5	162.0	162.0	162.0	162.0
Venezuela	1,444.9	1,444.9	1,444.9	1,444.9	1,444.9	1,323.1	1,323.1	1,224.2	1,229.2	1,224.2	1,258.3
TOTAL OPEC	4,972.3	5,189.3	5,214.4	5,767.5	5,995.5	5,136.2	5,943.9	6,229.5	6,479.5	6,550.2	6,628.7

Source: OPEC Annual Statistical Bulletin 1987.

OPEC'S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1966	1967	1968	1969	1970	1971	1972	1973	1974
Algeria	$ 508	$ 532	$ 589	$ 631	$ 681	$ 614	$ 1,028	$ 1,522	$ 4,267
Ecuador	1	1	1	1	1	1	59	282	693
Gabon	14	32	38	53	58	82	93	196	709
Indonesia	203	240	298	383	446	565	913	1,609	5,211
Iran	1,148	1,748	1,688	1,857	2,358	3,494	3,636	5,617	20,904
Iraq	698	610	755	769	788	1,083	1,027	1,842	6,534
Kuwait	808	803	860	910	1,596	2,143	2,370	3,520	10,354
Libya	1,002	1,169	1,857	2,159	2,357	2,697	2,888	3,919	8,175
Nigeria	260	204	104	367	715	1,342	1,796	2,905	8,619
Qatar	180	202	210	222	227	301	382	601	1,979
Saudi Arabia	1,298	1,384	2,020	2,107	2,418	3,803	5,477	8,956	35,476
United Arab Emirates	247	262	335	391	485	718	998	1,867	6,948
Venezuela	2,190	2,307	2,330	2,279	2,371	2,882	2,857	4,328	10,548
TOTAL OPEC	8,558	9,493	11,085	12,129	14,501	19,725	23,524	37,164	120,457

Source: OPEC Annual Statistical Bulletin 1987.

Section XIV
Table 6a

OPEC'S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Algeria	$ 4,295	$ 4,791	$ 5,562	$ 5,856	$ 8,746	$ 12,647	$ 12,985	$ 10,770	$ 9,467	$ 9,189
Ecuador	516	565	500	604	1,161	1,563	1,709	1,509	1,733	1,835
Gabon	841	881	927	975	1,265	1,876	1,723	1,720	1,500	1,767
Indonesia	5,311	6,004	7,298	7,439	8,871	15,595	18,164	15,223	13,558	12,477
Iran	19,634	22,923	23,599	21,684	19,186	13,386	12,053	19,233	19,225	12,255
Iraq	8,227	9,201	9,560	10,913	21,382	26,296	10,422	10,104	9,900	11,992
Kuwait	8,424	8,953	8,778	9,422	16,770	17,678	13,790	8,827	9,736	10,740
Libya	6,677	9,399	11,220	9,681	15,693	21,396	14,531	13,250	11,905	10,747
Nigeria	7,569	9,943	11,046	8,986	16,303	25,262	17,569	12,833	10,266	11,704
Qatar	1,757	2,137	1,982	2,294	3,643	5,405	5,348	4,106	3,104	4,381
Saudi Arabia	29,473	38,157	43,308	40,332	62,855	108,174	118,998	78,119	44,832	36,263
United Arab Emirates	6,762	8,258	9,132	8,624	12,915	19,558	18,815	15,337	12,235	12,978
Venezuela	8,324	8,763	9,110	8,740	13,633	18,248	19,039	15,624	13,839	12,145
TOTAL OPEC	107,810	129,975	142,022	135,550	202,423	286,984	265,146	206,655	161,260	148,473

Source: OPEC Annual Statistical Bulletin 1987.

Section XIV
Table 6b

OPEC'S VALUES OF PETROLEUM EXPORTS
(Millions of Dollars)

Country	1985	1986	1987
Algeria	$ 9,170	$ 4,810	$ 5,920
Ecuador	1,927	983	820
Gabon	1,668	725	955
Indonesia	9,083	5,501	6,335
Iran	13,115	7,199	10,000
Iraq	11,380	7,238	11,300
Kuwait	9,817	6,378	7,520
Libya	10,523	6,139	5,650
Nigeria	12,327	6,176	7,166
Qatar	3,584	1,669	1,781
Saudi Arabia	25,936	17,794	20,481
United Arab Emirates	11,799	7,509	8,721
Venezuela	10,352	6,713	9,050
TOTAL OPEC	130,681	78,834	95,699

Source: OPEC Annual Statistical Bulletin 1987.

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Algeria	1,780	1,961	2,128	2,357	2,972	2,599	6,573	4,092	3,196	3,807	7,516
Ecuador	--	--	--	14	14	14	14	17	28	28	31
Gabon	11	11	17	24	22	32	31	34	283	637	262
Indonesia	3,156	510	623	633	1,193	1,239	1,253	1,229	800	1,127	2,322
Iran	1,242	1,404	2,850	4,370	4,944	12,881	14,278	16,342	17,789	20,661	20,282
Iraq	498	607	484	485	762	784	925	935	910	836	1,299
Kuwait	1,817	2,380	2,780	3,339	3,727	2,037	2,104	2,487	2,786	2,931	3,212
Libya	--	--	--	--	--	294	708	2,832	4,531	4,075	4,635
Nigeria	98	176	181	147	64	111	184	273	303	404	402
Qatar	81	82	113	514	852	1,005	1,005	1,103	1,580	1,298	2,003
Saudi Arabia	1,031	1,133	1,136	1,639	1,744	1,230	1,378	1,178	2,316	3,835	3,772
United Arab Emirates	--	--	454	600	569	756	1,045	1,038	1,251	1,199	1,090
Venezuela	7,034	5,983	6,300	6,850	7,065	7,710	7,472	7,427	9,149	9,669	9,404
TOTAL OPEC	16,748	14,247	16,994	20,972	23,928	30,692	36,970	38,987	44,922	50,507	56,230

SOURCE: OPEC Annual Statistical Bulletin

Section XIV
Table 7a

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Algeria	7,585	5,738	8,078	15,548	11,647	21,862	26,686	36,267	35,039	36,470
Ecuador	31	40	40	35	31	55	73	85	81	78
Gabon	169	177	165	150	159	143	150	118	71	80
Indonesia	2,338	5,652	10,865	15,765	18,503	18,775	19,076	21,992	32,969	33,905
Iran	19,997	18,852	16,948	17,913	7,138	5,950	7,200	11,000	13,500	14,600
Iraq	1,802	1,178	1,221	1,751	1,281	620	680	470	590	850
Kuwait	3,864	4,213	4,721	6,251	4,071	*4,684	3,675	4,035	4,376	4,200
Libya	4,779	5,051	5,121	6,785	5,170	3,150	3,350	3,710	4,600	5,200
Nigeria	632	500	380	1,378	1,070	2,155	1,413	2,298	2,051	2,800
Qatar	1,094	1,551	1,479	4,362	4,741	4,323	5,055	5,235	5,930	5,460
Saudi Arabia	4,434	5,565	7,297	9,167	11,431	22,245	8,950	4,380	18,200	18,800
United Arab Emirates	1,371	3,796	5,164	5,431	6,863	9,075	8,320	8,400	11,060	13,210
Venezuela	11,658	12,729	12,523	14,382	14,805	14,886	15,883	15,640	17,300	17,326
TOTAL OPEC	59,754	65,042	74,002	98,918	86,910	107,923	100,511	113,630	145,767	152,979

Source: OPEC Annual Statistical Bulletin 1987.

Section XIV
Table 7b

OPEC MARKETED PRODUCTION OF NATURAL GAS
(Millions of Cubic Meters)

Country	1986	1987
Algeria	37,560	43,170
Ecuador	80	40
Gabon	90	115
Indonesia	35,374	36,550
Iran	15,200	16,000
Iraq	1,550	3,750
Kuwait	5,730	5,300
Libya	5,600	5,000
Nigeria	3,299	3,700
Qatar	5,800	5,610
Saudi Arabia	25,200	26,800
United Arab Emirates	15,220	19,310
Venezuela	19,074	18,589
TOTAL OPEC	169,777	183,934

Source: OPEC Annual Statistical Bulletin 1987.

BASIC PETROLEUM DATA BOOK

SECTION XV. MISCELLANEOUS

Table 1. Estimated Average Number of Employees in Important Segments of the Petroleum Industry

Table 2. U.S. Service Station Population by State

Table 3. Conversion Table

Table 4. Heat Values for Various Energy Products

Table 5. U.S. Petroleum Industry Injury Frequency Rates by Industry Sector

Table 6. U.S. Acreage Under Lease for Oil and Gas Production

Table 7. Map--Petroleum Administration for Defense (PAD) Districts

Table 8. Heating Equipment and Fuels for Occupied Housing Units

ESTIMATED AVERAGE NUMBER OF EMPLOYEES IN IMPORTANT SEGMENTS OF THE PETROLEUM INDUSTRY IN 1987

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Alabama	1,312	423	100	83	3,123	5,116	7,951	18,108
Alaska	8,063	261	0	922	244	530	1,069	11,089
Arizona	105	NA	NA	122	1,866	1,311	8,662	12,066
Arkansas	2,576	NA	NA	NA	2,154	2,795	5,330	12,855
California	32,282	24,007	863	1,184	11,455	14,999	63,918	148,708
Colorado	14,300	586	1,004	92	2,036	2,216	8,271	28,505
Connecticut	150	NA	88	NA	1,290	1,600	9,364	12,492
Delaware	0	772	9	4	316	268	1,475	2,844
Florida	680	46	207	70	2,140	6,630	29,777	39,550
Georgia	71	94	137	466	4,161	5,829	17,508	28 266
Hawaii	NA	432	0	0	343	591	3,615	4,981
Idaho	18	0	0	16	332	1,401	3,051	4,818
Illinois	3,799	8,074	271	891	7,865	9,408	25,922	56,230
Indiana	599	2,316	295	410	2,946	3,284	17,537	27,387
Iowa	29	0	53	154	1,265	3,155	12,256	16,912
Kansas	9,733	2,302	365	1,820	2,896	2,247	8,543	27,906
Kentucky	2,290	3,683	114	140	3,241	3,055	10,374	22,897
Louisiana	51,600	11,200	800	1,000	6,200	5,300	7,600	83,700
Maine	NA	0	0	NA	NA	1,329	3,297	4,626
Maryland	35	NA	NA	0	NA	2,675	13,450	16,160
Massachusetts	290	NA	377	NA	4,957	2,694	15,708	24,026
Michigan	4,216	1,615	781	279	6,811	5,829	23,367	42,898
Minnesota	NA	NA	157	194	2,257	2,580	16,606	21,794
Mississippi	5,359	1,534	112	0	2,124	2,964	5,905	17,998
Missouri	63	11	411	230	4,867	6,020	19,056	30,658
Montana	2,010	765	1	78	289	1,262	3,144	7,549
Nebraska	592	NA	NA	102	2,246	1,895	6,683	11,518
Nevada	222	26	0	26	738	453	3,831	5,296
New Hampshire	1	0	3	3	260	460	2,813	3,540
New Jersey	148	6,248	983	162	2,265	3,727	18,872	32,405
New Mexico	8,893	647	32	361	3,077	2,195	4,053	19,258
New York	1,785	5,673	407	124	6,716	8,845	28,076	51,626
North Carolina	5	NA	224	121	2,665	5,905	10,888	19,808
North Dakota	2,601	221	147	158	1,045	2,210	2,390	8,772
Ohio	7,159	5,336	785	675	7,382	6,646	30,253	58,236
Oklahoma	43,438	6,635	439	1,375	5,293	4,299	7,090	68,569
Oregon	87	NA	NA	NA	NA	2,451	8,801	11,430
Pennsylvania	4,100	8,200	800	700	8,500	9,900	27,300	59,500
Rhode Island	7	NA	NA	NA	901	409	2,383	3,700
South Carolina	31	0	NA	NA	574	3,737	7,685	12,027
South Dakota	100	0	0	64	126	1,528	2,606	4,424
Tennessee	351	338	128	42	1,824	5,225	11,892	19,800

Section XV
Table 1a

ESTIMATED AVERAGE NUMBER OF EMPLOYEES IN IMPORTANT SEGMENTS OF THE PETROLEUM INDUSTRY IN 1987

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Texas	171,253	29,665	1,147	4,708	26,710	23,101	34,045	290,629
Utah	1,903	778	11	79	2,307	1,676	5,080	11,534
Vermont	0	0	0	0	103	430	2,067	2,600
Virginia	NA	NA	55	NA	3,012	8,335	15,482	26,884
Washington	191	1,571	NA	79	NA	2,692	10,347	14,880
West Virginia	4,298	435	114	197	4,837	1,495	4,844	16,120
Wisconsin	11	136	73	164	2,848	3,343	16,455	23,030
Wyoming	8,866	905	6	241	1,065	1,030	2,894	15,007
District of Columbia	68	69	0	0	599	150	906	1,792
Total U.S.	395,690	125,095	11,499	17,436	160,271	196,925	610,492	1,517,408

NA Not Available

Note: The above estimates represent results of the Independent Petroleum Association of America's survey of State Labor Departments. The totals of these individual state estimates do not agree with totals shown by the Bureau of Labor Statistics in its "Employment and Earnings" publication due to confidentiality rules.

Section XV
Table 2

U.S. SERVICE STATION POPULATION BY STATE

	1977(1)	1980	1981	1982(1)	1983	1984	1985	1986	1987
Alabama	3,562	3,198	3,051	2,001	1,889	1,827	1,722	1,660	1,617
Alaska	211	188	179	176	166	161	152	146	142
Arizona	1,656	1,486	1,418	1,204	1,137	1,099	1,036	1,006	973
Arkansas	2,407	2,161	2,062	1,216	1,148	1,110	1,047	999	983
California	14,388	12,916	12,320	10,624	10,029	9,698	9,145	8,814	8,585
Colorado	2,485	2,230	2,127	1,570	1,482	1,433	1,351	1,302	1,269
Connecticut	2,215	1,988	1,897	1,726	1,629	1,576	1,486	1,432	1,395
Delaware	435	391	373	300	283	274	258	249	242
Dist. of Col.	250	224	214	158	149	144	136	131	128
Florida	7,287	6,541	6,240	5,504	5,196	5,024	4,738	4,566	4,448
Georgia	5,066	4,546	4,337	3,077	2,905	2,809	2,649	2,553	2,487
Hawaii	415	372	355	367	346	335	316	304	297
Idaho	830	745	711	494	466	451	425	410	399
Illinois	7,815	7,014	6,691	5,132	4,845	4,685	4,418	4,258	4,147
Indiana	4,867	4,348	4,148	3,167	2,990	2,891	2,726	2,627	2,559
Iowa	3,424	3,074	2,933	2,064	1,948	1,884	1,777	1,712	1,668
Kansas	2,466	2,214	2,112	1,511	1,426	1,379	1,301	1,254	1,221
Kentucky	3,452	3,099	2,956	2,119	2,000	1,934	1,824	1,758	1,712
Louisiana	2,989	2,683	2,560	1,972	1,862	1,800	1,698	1,636	1,594
Maine	933	838	799	640	604	584	551	531	517
Maryland	2,465	2,213	2,111	1,877	1,772	1,713	1,616	1,557	1,517
Massachusetts	3,882	3,484	3,324	2,962	2,796	2,704	2,550	2,457	2,394
Michigan	6,572	5,899	5,628	4,130	3,899	3,770	3,555	3,426	3,337
Minnesota	3,280	2,944	2,809	2,228	2,103	2,034	1,918	1,848	1,800
Mississippi	1,962	1,761	1,680	1,191	1,124	1,087	1,025	988	962
Missouri	5,008	4,497	4,290	2,944	2,779	2,687	2,534	2,442	2,379
Montana	968	868	828	528	498	482	455	438	427
Nebraska	1,732	1,555	1,483	1,129	1,066	1,031	972	937	912
Nevada	641	575	549	476	449	435	410	395	385
New Hampshire	704	632	603	547	516	499	471	454	442
New Jersey	5,350	4,802	4,581	4,157	3,924	3,795	3,578	3,449	3,359
New Mexico	1,389	1,247	1,190	780	736	712	671	647	630
New York	9,425	8,298	7,917	6,328	5,973	5,777	5,447	5,250	5,114
North Carolina	5,775	5,185	4,946	3,049	2,878	2,783	2,625	2,529	2,464
North Dakota	687	617	589	422	398	385	363	350	341
Ohio	8,820	7,916	7,552	5,704	5,573	5,389	5,082	4,898	4,771
Oklahoma	3,063	2,748	2,622	1,599	1,509	1,460	1,376	1,327	1,292
Oregon	2,185	1,962	1,872	1,492	1,408	1,362	1,284	1,238	1,206
Pennsylvania	8,994	8,073	7,702	5,781	5,457	5,277	4,976	4,796	4,672
Rhode Island	697	625	596	515	486	470	443	427	416
South Carolina	3,001	2,694	2,570	1,666	1,573	1,521	1,434	1,382	1,346
South Dakota	861	772	736	533	503	487	459	442	431
Tennessee	4,090	3,671	3,502	2,490	2,351	2,273	2,143	2,066	2,012
Texas	12,747	11,442	10,916	8,213	7,753	7,497	7,070	6,814	6,637
Utah	1,149	1,031	984	842	795	769	725	699	680
Vermont	540	484	462	359	339	328	309	298	290
Virginia	3,992	3,583	3,418	2,652	2,503	2,421	2,283	2,200	2,143
Washington	3,005	2,696	2,572	2,146	2,026	1,959	1,847	1,780	1,734
West Virginia	1,818	1,632	1,557	1,061	1,002	969	913	880	857
Wisconsin	4,043	3,629	3,462	2,701	2,550	2,466	2,325	2,241	2,183
Wyoming	647	580	553	430	406	393	370	357	347
U.S. TOTAL	176,465	158,491	151,200	116,154	109,649	106,031	99,987	96,361	93,864

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(1) Data from 1977 through 1981 represent total service stations. Data beginning in 1982 represent stations with payrolls which, by Census Bureau definition, generate more than half of their sales dollars through the sale of gasoline and oil products.

Source: 1977 and 1982: U.S. Census Bureau, Retail Trade Census
Other years: National Petroleum News estimates based on Census Bureau and other Commerce Department data.

Section XV
Table 3

THE FOLLOWING EQUIVALENTS ARE DERIVED FROM THE USE OF BRITISH THERMAL UNIT HEAT VALUES(1)

		Crude Petroleum (42 gal/bbl)	Anthracite Coal (short ton)	Bituminous Coal (short ton)	Natural Gas-Dry (1000 cu ft)	Distillate Fuel Oil (42 gal/bbl)	Residual Fuel Oil (42 gal/bbl)	Liquefied Pet. Gas (42 gal/bbl)
Crude Petroleum	42 Gal.Bbl.equals	-	0.228	0.221	5.604	0.996	0.923	1.446
Anthracite Coal	Short Ton equals	4.379	-	0.969	24.541	4.361	4.040	6.333
Bituminous Coal and Lignite	Short Ton equals	4.517	1.031	-	25.314	4.498	4.167	6.532
Natural Gas-Dry	1000 Cu.Ft.equals	0.178	0.041	0.040	-	0.178	0.165	0.258
Distillate Fuel Oil	42 Gal.Bbl.equals	1.004	0.229	0.222	5.628	-	0.927	1.452
Residual Fuel Oil	42.Gal.Bbl.equals	1.084	0.248	0.240	6.074	1.079	-	1.567
Liquefied Petroleum Gas	42 Gal.Bbl.equals	0.692	0.158	0.153	3.875	0.689	0.638	-
(1) B.T.U. Heat Values as used by Bureau of Mines	1000s	5,800	25,400	26,200	1,035	5,825	6,287	4,011

Other Refined Products' B.T.U. Values (1000s): Gasoline 5,248; Kerosine 5,670; Lubricants 6,064.8; Wax 5,537.3; Asphalt 6,636; Miscellaneous 5,796; Natural Gasoline 4,620 per 42 gallon barrel.

GALLON, BARREL, POUND AND TON EQUIVALENTS FOR CONVERTING MEASURES OF CRUDE PETROLEUM AND REFINED PETROLEUM PRODUCTS

	Gravity at 60 F.(2)	Gallons Per Pound	Pounds Per Gallon	Pounds Per 42 Gal Barrel	Short Ton 2,000 Pounds	Barrels Per Metric Ton 2,204.6 Pounds	Barrels Per Long Ton 2,240 Pounds
Crude Petroleum (Foreign)	25.6	.13333	7.500	315	6.349	6.998	7.111
Crude Petroleum (Domestic)	36.0	.14217	7.034	295	6.770	7.463	7.582
Gasoline and Naphtha	59.5	.16215	6.167	259	7.721	8.511	8.648
Kerosine	43.0	.14812	6.751	284	7.053	7.775	7.900
Distillate Fuel Oil	31.3	.13817	7.237	304	6.580	7.253	7.369
Residual Fuel Oil	18.0	.12687	7.882	331	6.041	6.660	6.766
Lubricating Oil	25.6	.13333	7.500	315	6.349	6.998	7.111
Lubricating Grease	33.4	.13996	7.145	300	6.665	7.346	7.464
Wax (Refined and Unrefined)	45.0	.14982	6.675	280	7.134	7.864	7.990
Asphalt	5.6	.11634	8.596	361	5.540	6.106	6.205
Coke	-	.10479	9.543	401	4.990	5.500	5.589
Road Oil	14.5	.12390	8.071	339	5.900	6.503	6.608
Petroleum Jelly and Petrolatum	33.4	.13996	7.145	300	6.665	7.346	7.464
Liquefied Petroleum Gas	-	.22104	4.524	190	10.526	11.603	11.789
Gilsonite	5.0	.11583	8.634	363	5.515	6.080	6.177

(2) For each product the gravity listed is assumed to be representative of the average

Still Gas 3,600 Cu.Ft. = One 42 Gallon Barrel
U.S. Gallon = .833 Imperial Gallon
Imperial Gallon = 1.2 U.S. Gallons

Source: API-ASTM-IP Petroleum Measurement Tables

Section XV
Table 4

HEAT VALUES FOR VARIOUS ENERGY PRODUCTS

Energy Products	Units	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Coal											
Production	Million Btu/sh. ton	23.376	23.072	22.897	22.855	22.597	22.248	22.454	22.415	22.308	22.239
Consumption	Million Btu/sh. ton	23.057	22.677	22.506	22.498	22.265	22.017	22.100	21.947	21.713	21.674
Coal Coke	Million Btu/sh. ton	24.800	24.800	24.800	24.800	24.800	24.800	24.800	24.800	24.800	24.800
Crude Oil(1)	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Petroleum Products											
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494	5.479	5.448	5.415
Residential & Commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471	5.468	5.409	5.392
Industrial	Million Btu/barrel	5.568	5.538	5.528	5.538	5.555	5.553	5.418	5.376	5.313	5.263
Transportation	Million Btu/barrel	5.395	5.394	5.392	5.395	5.400	5.404	5.428	5.440	5.432	5.422
Electric Utilities	Million Btu/barrel	6.245	6.238	6.250	6.251	6.249	6.251	6.258	6.254	6.258	6.258
LPG average	Million Btu/barrel	3.746	3.730	3.715	3.711	3.677	3.669	3.680	3.674	3.643	3.615
Natural Gas Plant Liquids	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925	3.955	3.914	3.930	3.872
Natural Gas											
Production, dry	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028
Production, wet	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092	1,098	1,103	1,107
Consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028
Fossil Fuel Steam-Electric Power Plant Generation(2)	Btu/kilowatthour	10,389	10,442	10,406	10,373	10,435	10,361	10,353	10,388	10,453	10,454
Nuclear Power Plant Gen.	Btu/kilowatthour	10,903	11,161	11,013	11,047	10,769	10,941	10,879	10,908	11,030	11,073
Geothermal Power Plant Gen.	Btu/kilowatthour	21,674	21,674	21,611	21,611	21,611	21,611	21,545	21,639	21,639	21,629
Electricity Consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412

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(1) Includes lease condensate.

(2) This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

Section XV
Table 4a

HEAT VALUES FOR VARIOUS ENERGY PRODUCTS

Energy Product	Units	1983	1984	1985	1986	1987	1988(3)	1989(3)
Coal								
Production	Million Btu/sh. ton	22.052	22.010	21.870	21.913	21.922	21.832	21.832
Consumption	Million Btu/sh. ton	21.576	21,573	21.366	21.462	21.517	21.340	21.340
Coal Coke	Million Btu/sh. ton	24.800	24.800	24.800	24.800	24.800	24.800	24.800
Crude Oil(1)	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Petroleum Products								
Consumption	Million Btu/barrel	5.406	5.395	5.387	5.418	5.403	5.404	5.404
Residential & Commercial	Million Btu/barrel	5.286	5.261	5.203	5.238	5.245	5.239	5.239
Industrial	Million Btu/barrel	5.272	5.252	5.261	5.335	5.291	5.277	5.277
Transportation	Million Btu/barrel	5.416	5.425	5.423	5.423	5.424	5.423	5.423
Electric Utilities	Million Btu/barrel	6.255	6.251	6.247	6.257	6.249	6.250	6.250
LPG average	Million Btu/barrel	3.614	3.599	3.603	3.640	3.659	3.658	3.658
Natural Gas Plant Liquids	Million Btu/barrel	3.839	3.812	3.815	3.797	3.804	3.813	3.813
Natural Gas								
Production, dry	Btu/cubic foot	1,031	1,031	1,032	1,030	1,031	1,031	1,031
Production, wet	Btu/cubic foot	1,115	1,109	1,112	1,110	1,112	1,112	1,112
Consumption	Btu/cubic foot	1,031	1,031	1,032	1,030	1,031	1,031	1,031
Fossil Fuel Steam-Electric Power Plant Generation	Btu/kilowatthour	10,520	10,323	10,339	10,261	10,253	10,253	10,253
Nuclear Power Plant Gen.	Btu/kilowatthour	10,905	10,843	10,813	10,799	10,776	10,776	10,776
Geothermal Power Plant Gen.	Btu/kilowatthour	21,290	21,303	21,263	21,263	21,263	21,263	21,263
Electricity Consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412	3,412

(1) Includes lease condensate.

(2) This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

(3) Preliminary data.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review, January 1989.

Section XV
Table 5

U.S. PETROLEUM INDUSTRY INJURY FREQUENCY RATES BY INDUSTRY SECTOR(1)

Industry Sector	1980	1981	1982	1983	1984	1985	1986	1987
Exploration & Production	3.07	2.60	2.58	2.38	2.06	2.36	2.64	2.73
Gas Processing	3.67	4.33	3.82	3.81	3.77	3.95	3.23	3.50
Drilling	24.96	23.34	18.91	14.23	14.91	11.13	18.23	8.02
Petrochemical Mftg.	6.11	5.07	3.54	3.41	2.60	2.50	3.49	5.56
Refining	5.87	5.21	4.88	4.31	3.52	3.49	6.07	7.10
Marketing-Wholesale	4.38	4.19	3.39	3.60	3.21	3.80	3.93	3.57
Marketing-Retail	4.88	4.49	4.25	3.72	4.42	3.96	5.10	4.47
Pipeline-Liquid	4.21	4.11	3.95	3.95	3.72	3.73	3.35	4.98
Pipeline-Gas	6.10	4.99	4.83	5.43	4.39	3.58	4.16	4.80
Marine	3.08	2.00	2.42	2.85	2.70	2.51	2.21	2.70
Research & Development	2.08	2.19	2.07	2.24	1.72	1.53	1.95	2.47
Gen. Services, Engineering, and Miscellaneous	1.31	1.35	1.30	1.29	1.08	1.14	1.16	1.46
Combined Functions	3.76	2.59	4.79	3.50	3.25	N.A.	N.A.	N.A.
TOTAL	4.22	3.77	3.48	3.20	2.85	2.77	3.46	3.89

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(1) Covers operations subject to OSHA recordkeeping requirements only. Frequency rates represent total recordable cases per 100 fulltime workers.

Source: American Petroleum Institute, Summary of Occupational Injuries and Illnesses In the Petroleum Industry.

Section XV
Table 6

U.S. ACREAGE UNDER LEASE FOR OIL AND GAS PRODUCTION
(As of January 1)

State	1981		1982		1983	
	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas
Alabama	8,895,085	183,035	9,183,076	183,076	9,297,939	227,040
Alaska	3,527,540	442,540	4,131,340	451,340	5,464,155	459,060
Arizona	12,005,400	5,400	20,146,200	6,200	22,018,200	7,200
Arkansas	9,132,700	1,025,200	10,140,960	1,140,960	12,086,910	1,168,700
California	4,106,000	516,000	5,055,461	455,461	6,018,559	608,646
Colorado	31,809,000	1,103,000	30,639,000	1,209,000	31,577,000	1,334,000
Florida	3,005,200	34,200	3,715,000	35,000	3,755,000	35,000
Illinois	4,413,000	663,000	4,673,000	673,000	4,468,000	668,000
Indiana	8,778,810	7,828,810	8,832,960	7,832,960	8,848,070	7,838,070
Kansas	13,222,400	3,804,000	13,794,900	3,882,000	17,000,000	7,600,000
Kentucky	4,950,000	950,000	5,225,000	975,000	5,500,000	1,000,000
Louisiana	15,962,000	4,595,000	16,100,000	7,000,000	13,550,000	6,990,000
Maryland	449,200	14,200	494,200	14,200	494,200	14,200
Michigan	12,550,000	550,000	14,074,000	574,000	14,324,000	574,000
Mississippi	7,951,400	603,400	11,926,500	626,500	11,944,100	628,500
Missouri	504,430	4,030	612,298	12,298	632,900	12,900
Montana	36,060,000	850,000	38,170,000	940,000	42,023,000	1,003,000
Nebraska	12,584,000	280,000	12,570,000	320,000	14,416,000	331,000
Nevada	17,855,800	3,800	23,554,000	4,000	31,646,600	4,600
New Mexico	30,130,000	3,330,000	30,020,000	3,720,000	31,413,000	3,655,000
New York	5,500,000	1,000,000	5,710,000	1,110,000	5,850,000	1,250,000
North Dakota	22,299,000	473,000	22,920,000	530,000	22,256,000	591,000
Ohio	16,527,377	2,861,927	16,520,326	2,979,826	16,448,304	3,076,994
Oklahoma	16,886,900	3,769,000	17,402,000	4,145,900	17,691,600	4,491,600
Oregon	4,001,120	1,120	4,001,000	1,000	9,001,500	1,500
Pennsylvania	17,010,160	2,625,160	17,137,160	2,731,500	17,540,160	2,851,770
South Dakota	7,457,500	19,500	8,120,000	21,000	7,027,000	33,000
Tennessee	6,522,160	22,160	8,327,257	27,257	8,528,500	28,500
Texas	59,974,600	10,900,000	64,350,000	11,750,000	64,723,000	12,475,000
Utah	29,519,000	345,000	30,900,000	364,000	32,014,000	400,000
Virginia	3,053,150	81,936	3,456,940	90,555	3,158,906	112,838
West Virginia	13,934,000	7,160,000	14,134,000	7,325,000	13,447,000	7,528,000
Wyoming	38,765,000	2,200,000	36,850,000	2,300,000	34,227,000	2,445,000
TOTAL U.S.(1)	479,531,532	58,144,418	522,518,628	73,060,033	538,390,603	69,444,118

(1) Totals may not add due to the addition of miscellaneous acreage for which detailed information is not available.

Source: IPAA--The Oil Producing Industry in Your State, Annuals.

Section XV
Table 6a

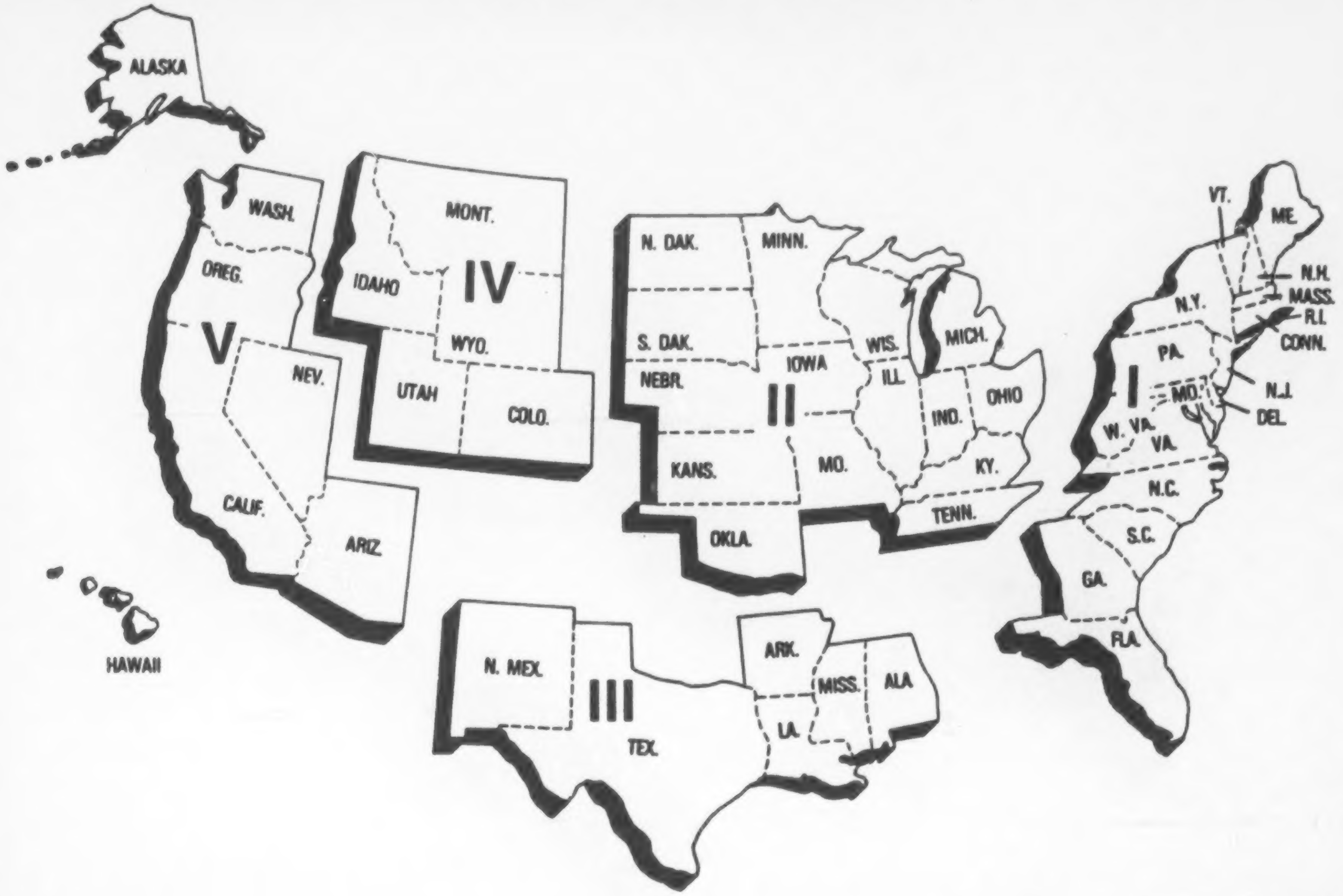
U.S. ACREAGE UNDER LEASE FOR OIL AND GAS PRODUCTION
(As of January 1)

State	1984		1985		1986	
	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas	Total Estimated Acreage Under Lease	Acreage Proved Productive of Oil and/or Gas
Alabama	9,416,034	276,428	9,182,000	316,000	8,010,000	371,000
Alaska	10,574,539	521,983	11,240,000	665,000	12,582,000	682,000
Arizona	23,730,680	6,080	23,731,000	6,000	23,747,000	6,000
Arkansas	13,300,000	1,200,000	12,998,000	1,215,000	10,694,000	1,205,000
California	8,565,791	433,791	9,250,000	500,000	5,810,000	428,000
Colorado	35,531,520	1,447,520	35,531,000	1,509,000	35,622,000	1,556,000
Florida	5,130,080	36,280	2,637,000	37,000	2,639,000	37,000
Georgia	1,894,127	0	2,800,000	0	2,291,000	0
Idaho	870,709	0	913,000	0	600,000	0
Illinois	4,629,000	679,000	4,735,000	706,000	5,900,000	880,000
Indiana	8,963,125	7,925,600	8,963,000	7,926,000	8,000,000	6,295,000
Iowa	0	0	5,000,000	0	5,000,000	0
Kansas	18,672,133	8,517,133	19,750,000	10,595,000	16,380,000	8,795,000
Kentucky	5,525,000	1,025,000	6,350,000	1,210,000	5,458,000	1,089,000
Louisiana	13,672,466	6,997,000	14,500,000	7,842,000	14,080,000	7,609,000
Maryland	524,200	14,200	314,000	17,000	316,000	16,000
Michigan	14,576,720	608,720	14,756,000	628,000	14,931,000	653,000
Mississippi	11,478,900	629,140	10,402,000	700,000	9,500,000	710,000
Missouri	712,900	12,900	713,000	13,000	712,000	12,000
Montana	44,050,200	1,054,400	44,050,000	1,085,000	44,111,000	1,105,000
Nebraska	13,411,080	326,080	13,411,000	334,000	13,508,000	340,000
Nevada	29,852,800	4,800	29,853,000	5,000	28,876,000	5,000
New Mexico	42,524,880	3,725,280	42,621,000	3,822,000	42,688,000	3,878,000
New York	5,900,000	2,000,000	5,600,000	2,000,000	5,610,000	2,010,000
North Carolina	200,000	0	457,000	0	500,000	0
North Dakota	23,299,820	617,120	23,300,000	643,000	23,324,000	658,000
Ohio	16,443,251	3,216,051	15,209,000	3,329,000	14,886,000	3,420,000
Oklahoma	18,990,000	4,025,000	19,200,000	7,211,000	20,435,000	7,675,000
Oregon	7,001,600	1,600	5,025,000	25,000	4,460,000	60,000
Pennsylvania	17,672,160	2,940,610	17,997,000	3,047,000	18,042,000	3,200,000
South Dakota	10,877,340	1,032,640	8,120,000	36,000	8,123,000	37,000
Tennessee	9,830,000	50,715	3,827,000	12,000	3,115,000	18,000
Texas	70,300,000	14,938,000	68,374,000	16,500,000	60,670,000	14,640,000
Utah	38,229,686	487,686	38,230,000	504,000	38,258,000	518,000
Virginia	3,376,396	122,700	3,236,000	147,000	2,586,000	316,000
West Virginia	13,757,000	7,693,000	13,408,000	7,807,000	12,673,000	7,807,000
Wyoming	38,999,100	2,598,400	38,999,000	2,659,000	39,064,000	2,697,000
TOTAL U.S.(1)	592,483,237	69,018,667	587,646,000	83,051,000	566,930,000	78.728.000

(1) Totals may not add due to the addition of miscellaneous acreage for which detailed information is not available.

Source: IPAA--The Oil Producing Industry in Your State, Annuals.

Petroleum Administration for Defense (PAD) Districts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HEATING EQUIPMENT AND FUELS FOR OCCUPIED HOUSING UNITS

(Thousands)

	1950	1960	1970	1980	1983
Total occupied units	42,826	53,024	63,445	80,390	84,638
Heating Equipment					
Warm air furnace	11,508(1)	17,378(1)	27,515(1)	39,279	44,320
Heat Pumps	(1)	(1)	(1)	2,835	2,171
Steam or Hot Water	10,071	11,990	13,211	13,859	13,772
Floor, Wall or Pipeless furnace	(1)	6,088	5,552	4,693	5,977
Built-in electric units	--	664	3,236	6,370	6,207
Room heaters with flue	15,399(2)	11,183(2)	7,209	6,098	3,438
Room Heaters without flue	5,268	5,218	3,558	2,736	2,926
Fireplaces, Stoves or Heaters (3)	(2)	(2)	2,766	3,977	5,152
None	581	503	398	541	677
House heating fuel					
Utility gas	11,387	22,851	35,014	42,658	46,700
Fuel oil, Kerosene, etc.	9,686	17,158	16,473	14,655	13,031
Electricity	283	933	4,876	14,768	15,684
Bottled, tank or LPgas	787	2,686	3,807	4,535	3,869
Wood or other fuel	4,855	2,460	1,060	2,729	4,245
Coal or Coke	14,828	6,456	1,821	504	432
None	999	478	395	541	677
Cooking Fuel					
Electricity	6,403	16,351	25,768	41,906	NA
Utility gas	22,084	27,296	31,244	32,375	NA
Bottled, tank or LPgas	3,417	6,491	5,314	5,569	NA
Other fuel	10,796	2,603	908	398	NA
None	124	280	213	142	NA

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(1) "Floor, well or pipeless furnace" and "heat pumps" included in "Warm air furnace".
(2) "Fireplace, stoves or portable heaters" included in "Room heaters with flue".
(3) Portable Heaters.

Source: U.S. Bureau of the Census, Census of Housing, 1960 and 1980; Current Housing Reports, Annual Housing Survey 1983.

SELECTED DEFINITIONS

NAPHTHA-TYPE JET FUEL--(Jet B) A fuel in the heavy naphtha boiling range covered by ASTM Spec. D 1655 and meeting military Spec. MIL-T-5624 (JP-4). Used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ramjet and petroleum rocket fuels.

NATURAL GAS--A mixture of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs at reservoir conditions. Natural gas may be subclassified as follows: Associated Gas, Dissolved Gas, and Non-associated Gas.

NATURAL GAS, PRODUCTION--Statistics pertaining to natural gas production represent volumes of gas produced from natural oil and gas reservoirs during given periods of time with adjustments (where applicable) to reflect (1) the volume of gas returned to natural reservoirs, and (2) the reduction of volume resulting from the removal of natural gas liquids and nonhydrocarbon gases. The volume of natural gas withdrawn from underground storage facilities is not included in natural gas production statistics.

NATURAL GAS, PROVED RESERVES--Proved reserves of natural gas as of December 31 of any given year are the estimated quantities of natural gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in the future from known natural oil and gas reservoirs under existing economic and operating conditions.

Reservoirs are considered proved if economic producibility is supported by either actual production or conclusive formation tests. The area of a reservoir considered proved includes: (1) that portion delineated by drilling and defined by gas-oil, gas-water or oil-water contacts; and (2) the adjoining portions not yet drilled but which can be reasonably judged economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurrence of hydrocarbons controls the lower proved limit of the reservoir.

Reserve estimates are prepared for total recoverable natural gas, nonassociated gas, and associated-dissolved gas. Estimates do not include (1) gaseous equivalents of natural gas liquids expected to be recovered from reservoir natural gas as it is produced; (2) natural gas being held in underground storage; or (3) nonhydrocarbon gases.

NATURAL GAS LIQUIDS--Those portions of reservoir gas which are liquefied at the surface in lease separators, field facilities, or gas processing plants. Natural gas liquids include but are not limited to: ethane, propane, butanes, pentanes, natural gasoline, and condensate.

NEW-FIELD WILDCAT--A well located on a structural feature or other type of trap which has not previously produced oil or gas.

OFFSHORE--Term defined as that geographic area which lies seaward of the coastline. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking seaward limit of inland water.

OFFSHORE WELL--A well which is bottomed at, or produces from, a point which lies seaward of the coastline. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking the seaward limit of inland water. If a state agency uses a different basis for classifying onshore and offshore wells, the state classification is used.

OIL WELL--A well completed for the production of crude oil from at least one oil zone or reservoir.

PAD DISTRICTS (Petroleum Administration for Defense Districts)--a geographic aggregation of the 50 states and the District of Columbia into five districts, originally designed by the Petroleum Administration for Defense in 1950 for purposes of administration. These are an outgrowth of the World War II Petroleum Administration for War Districts.

PETROLEUM PRODUCTS--A generic term used to describe products obtained from distilling and processing crude oil, unfinished oils, natural gas liquids, blend stocks and other miscellaneous hydrocarbon compounds.

PETROLEUM REFINERY--A complex installation of equipment designed to manufacture finished petroleum products from crude oil and other liquid hydrocarbons.

PRIMARY STOCKS OF PETROLEUM--Represents stocks held at refineries, natural gas processing plants, bulk terminals, pipelines and leases. Primary stocks exclude those held in secondary and tertiary (consumer) storage.

PROCESSING GAIN--The volumetric amount by which total refinery output is greater than input. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed. Therefore, in terms of volume (barrels), the total output of products is greater than input.

PROCESSING LOSS--The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed and thus an output, in barrels, smaller than the input.

PRODUCT SUPPLIED FOR DOMESTIC USE--Approximately represents consumption of petroleum products in that it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending operations, pipelines, and bulk terminals. It includes losses and fuels used in the industry.

RESIDUAL FUEL OIL--General classification for fuels obtained as liquid still bottoms from the distillation of crude, used alone or in blends with heavy liquids from other refinery process operations. Includes Grades No. 5 (light and heavy), No. 6 (including heady-grade, so-called Bunker C oil), and Navy Special fuel oil.

SERVICE WELL--A well drilled or completed for the purpose of supporting production in an existing field.

SELECTED DEFINITIONS

BARREL--unit of volumetric measure. One barrel equals 42 U.S. gallons.

CRUDE OIL--technically defined as a mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

CRUDE OIL, PRODUCTION--the volume of liquids statistically defined as crude oil, which is produced from oil reservoirs during given periods of time. The amount of such production for a given period is generally established by measurement of volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

CRUDE OIL, PROVED RESERVES--Proved reserves of crude oil as of December 31 of any given year are the estimated quantities of all liquids statistically defined as crude oil, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Reservoirs are considered proved if economic producibility is supported by either actual production or conclusive formation tests. The area of an oil reservoir considered proved includes: (1) that portion delineated by drilling and defined by gas-oil or oil-water contacts, if any; and (2) the immediately adjoining portions not yet drilled but which can be reasonably judged as economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurence of hydrocarbons controls the lower proved limit of the reservoir.

Reserves of crude oil which can be produced economically through application of improved recovery techniques (such as fluid injection) are included in the "proved" classification.

Estimates of proved crude oil reserves do not include the following: (1) oil that may become available from known reservoirs but is reported separately as "indicated additional reserves"; (2) natural gas liquids (including lease condensate); (3) oil the recovery of which is subject to reasonable doubt because of uncertainty as to geology, reservoir characteristics, or economic factors; (4) oil that may occur in untested prospects; and (5) oil that may be recovered from oil shales, coal, gilsonite, and other such sources.

DEVELOPMENT WELL--In general, a well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

DISTILLATE FUEL OIL--A general classification for one or more distilled petroleum fractions used for domestic heating and industrial burners, or for power generation in compression-ignition engines. These fractions are No. 1 Fuel Oil, No. 2 Fuel Oil, Diesel Fuel and No. 4 Fuel Oil.

DRY HOLE--An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

EXPLORATORY WELL--A well drilled (1) to find and produce oil or gas in an unproved area; (2) to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir; or (3) to extend the limits of a known oil or gas reservoir.

GAS WELL--A well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil.

KEROSINE--A refined petroleum distillate conforming to the requirements of ASTM D 3699. Two classifications are No. 1-K and No.2-K.

KEROSINE-TYPE JET FUEL (Jet A)--A quality kerosine product covered by ASTM Spec. D 1655. Used primarily as fuel for commercial turbojet and turboprop aircraft engines. A relatively low freezing point distillate of the kerosine type.

LIQUEFIED REFINERY GAS (LRG)--Includes liquefied refinery gases that were fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state and represent final products. Excludes still gases used for chemical or rubber manufacture which are reported as petrochemical feedstocks and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported in the following categories for use as petrochemical feedstock, for other uses or both: ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane.

LUBRICATING OILS--Includes all grades of paraffinic and naphthenic lubricating oil stocks, from light distillate spindle oils to residual cylinder stocks. Oils used in grease-making are also classified as lubricating oils.

MOTOR GASOLINE--A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, obtained by blending appropriate refinery streams to form a fuel suitable for use in spark ignition engines. Includes all refinery products within the gasoline range (ASTM Spec. D 439) that are to be marketed as motor gasoline without further processing, i.e., any refinery operation except mechanical blending. Includes both leaded and unleaded grades. Also includes finished components in the gasoline range which will be used for blending or compounding into finished gasoline.

SELECTED DEFINITIONS

STRATEGIC PETROLEUM RESERVE (SPR)--Petroleum inventories (currently only crude oil) held in Government-owned underground storage for use during periods of supply interruptions.

STRATIGRAPHIC TEST--A drilling effort, geologically directed, to obtain information pertaining to a specific geological condition that might lead toward the discovery of an accumulation of hydrocarbons. Such wells are customarily drilled without the intention of being completed for hydrocarbon production. This classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration.

UNFINISHED OILS--Includes all oils requiring further processing, i.e., any refinery operation except mechanical blending.

WELL--A hole drilled in the earth for the purpose of (1) finding or producing crude oil or natural gas; or (2) providing services related to the production of crude oil or natural gas.

CURRENT SOURCE LISTINGS FOR BASIC PETROLEUM DATA BOOK

Section I

U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

U.S. Department of Commerce, Bureau of the Census, Current Population Reports (202)763-5002.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section II

U.S. Department of Energy, Energy Information Administration, Crude Oil, Natural Gas and Natural Gas Liquids Reserves (202)586-6090.

Oil and Gas Journal, "Worldwide Report" issue (918)835-3161.

U.S. Department of Interior, U.S. Geological Survey, Circular 860 (703)860-7549.

Section III

American Petroleum Institute, Quarterly Completion Reports (202)682-8518

Society of Exploration Geophysicists, Geophysical Activity Annual Report (918)493-3516.

American Association of Petroleum Geologists, North American Drilling Activity (918)584-2555.

American Petroleum Institute, Joint Associationn Survey (202)682-8491.

Oil and Gas Journal (918)835-3161.

Hughes Tool Company (713)924-2413.

Reed Tool Company, Annual Rotary Rig Census (713)924-5200.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

World Oil Magazine (713)529-4301.

Interstate Oil Compact Commission and National Stripper Well Association (405)525-3556.

Section IV

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

National Stripper Well Association and Interstate Oil Compact Commission (405)525-3556.

Section V

U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings" (202)523-1821.

The Chase Manhattan Bank, "Financial Analysis of a Group of Petroleum Companies" (212)552-2222.

The Chase Manhattan Bank, "Capital Investments of the World Petroleum Industry" (212)552-2222.

American Petroleum Institute, Survey of Oil and Gas Expenditures (202)682-8491.

American Petroleum Institute, Environmental Expenditures of the United States Petroleum Industry (202)682-8470.

American Petroleum Institute, Financial Trends of Leading U.S. Oil Companies (202)682-8551.

U.S. Department of Treasury, Internal Revenue Service, SOI Bulletin (202)376-0102.

U.S. Department of Commerce, Bureau of the Census, FT 135 and FT 410 (202)763-5140.

Section VI

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

U.S. Department of Labor, Bureau of Labor Statistics, Producer Price Indexes (202)272-5123.

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Prices: Energy and Food (202)272-5177.

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index (unadjusted) (202)272-5160.

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annual (202)586-6077.

U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly (202)586-5214.

Petroleum Intelligence Weekly (212)575-1242.

Section VII

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section VII (continued)
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Monthlies (202)586-8800.

U.S. Department of Energy, Energy Information Administration, Petroleum Marketing Monthly (202)586-5214.

U.S. Department of Transportation, Federal Highway Administration, "Monthly Motor Fuel Reported by States" (202)426-0170.

Section VIII
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Oil and Gas Journal, "Worldwide Report" issue (918)835-3161.

British Petroleum, BP Statistical Review of World Energy. (212)887-9300.

U.S. Department of Energy, Energy Information Administration, International Energy Annual (202)586-9412.

Section IX
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (212)887-9300.

Section X
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

British Petroleum, BP Statistical Review of World Energy (202) 887-9300.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

Section XI
U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

U.S. Department of Interior, U.S. Geological Survey, Minerals Management Service (202)343-3421.

Offshore Magazine (713)621-9720.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

Section XII
American Gas Association, Gas Facts (703)841-8400.

Association of Oil Pipelines (202)331-8228.

U.S. Department of Transportation, Coast Guard, "Polluting Incidents In and Around U.S. Waters" (202)267-2229.

U.S. Department of Transportation, Federal Highway Administration, "Highway Statistics" (202)426-0160.

Automotive News, "Market Data Book" issues (313)446-6000.

Section XIII
U.S. Department of Energy, Energy Information Administration, Crude Oil, Natural Gas and Natural Gas Liquids Reserves (202)586-6090.

Oil and Gas Journal "Worldwide Report" issues (918)835-3161.

U.S. Department of Energy, Energy Information Administration, Natural Gas Annuals (202)586-6077.

U.S. Department of Energy, Energy Information Administration, Natural Gas Monthly (202)586-6077.

Section XIV
Oil and Gas Journal, "Worldwide Report" issues (918)835-3161.

Central Intelligence Agency, International Energy Statistical Review. Inquiries directed to DOCEX Project (202)287-9527.

U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual (202)586-8800.

Organization of Petroleum Exporting Countries, OPEC Annual Statistical Bulletin, Obere Donaustrasse 93, A-1020 Vienna, Austria.

Section XV
Independent Petroleum Association of America, The Oil Producing Industry in Your State (202)857-4722.

National Petroleum News, Factbook issue (201)682-2902.

ASTM-IP Petroleum Measurement Tables, API (202)682-8145.

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (202)586-8800.

American Petroleum Institute, Summary of Occupational Injuries and Illnesses in the Petroleum Industry (202)682-8506.